

UPPER COOK INLET COMMERCIAL FISHERIES ANNUAL MANAGEMENT REPORT, 2003



By

Jeff Fox

and

Pat Shields

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UPPER COOK INLET STAFF

Area Management Biologist	Jeff Fox
Asst. Area Management Biologist	Pat Shields
Research Project Leader	Mark Willette
Research Biologist	Bob DeCino
Research Biologist	Dave Westerman
Research Technician	Terri Tobias
Field Office Assistant	Sandi Seagren

Alaska Department of Fish and Game
Commercial Fisheries Division
Central Region
333 Raspberry Road
Anchorage, Alaska 99518-1599

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AUTHORS

Jeff Fox is the Upper Cook Inlet Commercial Fisheries Area Management Biologist with the Alaska Department of Fish and Game, Commercial Fisheries Division, Region II, Upper Cook Inlet, 43961 Kalifornsky Beach Road, Suite B, Soldotna, AK 99669.

Pat Shields is the Upper Cook Inlet Commercial Fisheries Assistant Area Management Biologist with the Alaska Department of Fish and Game, Commercial Fisheries Division, Region II, Upper Cook Inlet, 43961 Kalifornsky Beach Road, Suite B, Soldotna, AK 99669.

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INTRODUCTION

The Upper Cook Inlet (UCI) management area consists of that portion of Cook Inlet north of the latitude of Anchor Point and is divided into the Central and Northern Districts (Figures 1 and 2). The Central District is approximately 75 miles long, averages 32 miles in width, and is further subdivided into six subdistricts. The Northern District is 50 miles long, averages 20 miles in width and is divided into two subdistricts. At present, all five species of Pacific salmon (*Oncorhynchus*), razor clams (*Siliqua patula*), and Pacific herring (*Clupea harengus pallasii*) are subject to commercial harvest in Upper Cook Inlet. Harvest statistics are gathered and reported by five-digit statistical areas and sub-areas (Figure 3).

Salmon

Since the inception of a commercial fishery in 1882, many gear types, including fish traps, gillnets, and seines have been employed with varying degrees of success to harvest salmon in UCI. Currently, set (fixed) gillnets are the only gear permitted in the Northern District, while both set and drift gillnets are used in the Central District. The use of seine gear is restricted to the Chinitna Bay Subdistrict where they are employed sporadically. Drift gillnets have accounted for approximately 50% of the average annual salmon harvest since 1966 with set gillnets harvesting virtually all of the remainder (Appendix A.1-5).

Commercial salmon harvest statistics specific to gear type and area are available only back to 1954 (Appendix A.6). Run-timing and migration routes utilized by all species overlap to such a degree that the commercial fishery is largely mixed-stock and mixed-species in nature. Typically, the UCI harvest represents approximately 5% of the statewide catch. Nearly 10% of all salmon permits issued statewide are for the Cook Inlet area.

In terms of their economic value, sockeye salmon (*O. nerka*) are by far the most important component of the catch followed by coho (*O. kisutch*), chum (*O. keta*), pink (*O. gorbuscha*) and chinook salmon (*O. tshawytscha*) (Appendix A.7).

Herring

Commercial herring fishing began in UCI in 1973 with a modest harvest of bait-quality fish along the east side of the Central District and expanded in the late 1970's to include small-scale sac roe fisheries in Chinitna and Tuxedni Bays (Appendix A.8). The total herring harvest has averaged well under 400 tons, having an exvessel value below \$200,000 – which makes it one of the smallest

herring fisheries in the state. Since 1998, the exvessel value of this fishery has been far less than in prior years, with an exvessel value of less than \$20,000 each of the last five years.

Because the glacial waters of UCI preclude the use of aerial surveys to estimate biomass of herring stocks, the management approach utilized has departed from the standard techniques employed in the more traditional herring fisheries. Gillnets are the only legal gear for herring in Upper Cook Inlet, with set gillnets being used almost exclusively. Harvests are generally concentrated in the Clam Gulch area (bait herring) and in the Snug Harbor and Magnetic Island areas of Tuxedni Bay, and near Clam Cove and Camp Point in Chinitna Bay (roe herring).

Beginning in 1988 in Tuxedni Bay, significant decreases in herring abundance and a shift towards older age class herring were observed, resulting in the closure of Tuxedni Bay by emergency order prior to the 1992 season. In Chinitna Bay, and along the eastside beaches, similar declines began to materialize after the 1990 season. As a result of these declines, a Department proposal to the Alaska Board of Fisheries (BOF) to open the UCI herring fishery, by emergency order only, was submitted. This proposal passed and became regulation for the 1993 season, ending a long period with fixed opening dates of April 15 on the east side and April 22 on the west side of the Inlet. This action effectively closed this fishery until the herring stocks recovered. Beginning in 1998, the Upper Subdistrict was reopened for two days per week, from April 15 to May 20, to assess the status of this population. The herring fisheries on the west side of Cook Inlet remained closed until the status of the east side stocks was determined. In addition, the Department submitted proposals to the BOF to restructure the herring fishery to two 30-hour periods per week, beginning on Mondays and Thursdays. These proposals included pre-season registration requirements as well as stipulating that fishermen must report their harvest within 12 hours of the closure of a fishing period. The proposals were passed in the form of a management plan prior to the 1999 season. The management plan was amended by the BOF prior to the 2002 fishing season, extending the closing date for the fishery an additional 11 days to May 31.

Razor Clams

The commercial harvest of razor clams from UCI beaches dates back to 1919. Harvest levels have fluctuated from no fishery for as many as eight consecutive years to production in excess of half a million pounds (live weight) in 1922 (Appendix A.9). The sporadic nature of the fishery has been more a function of limited market opportunities rather than limited availability of the resource. Razor clams are present in many areas of Cook Inlet, with particularly dense concentrations occurring near Polly Creek on the western shore and from Clam Gulch to Ninilchik on the eastern shore (Nickerson 1975). The eastern shoreline has been set aside for sport harvest exclusively since

1959 and all commercial harvests since that time have come from the west shore, principally from the Polly Creek and Crescent River bar areas. A large portion of the Polly Creek beach is approved for the harvest of clams for the human food market. Bait clams may be taken only outside of this approved area, except that a limit of 10% shell breakage is allowed for sale as bait clams in this fishery from the certified area. No overall harvest limits are in place for any area in regulation; however, the Department manages the commercial fishery to achieve a harvest of no more than 350,000 to 400,000 pounds annually. Virtually all of the commercial harvest has come by hand digging, although regulations prior to 1990 allowed the use of mechanical harvesters (dredges) south of Spring Point, or within a one-mile section of the Polly Creek beach. Numerous attempts to develop feasible dredging operations were largely unsuccessful due to excessive shell breakage or the limited availability of clams in the area open to this gear. Currently, the use of mechanical harvesters is not permitted in any area of Cook Inlet.

2003 COMMERCIAL SALMON FISHERY

The commercial harvest of 3.8 million salmon in UCI in 2003 was approximately equal to the average harvest for the last 50 years (Table A.6.). This was also the highest total salmon harvest since 1997. The exvessel value of \$12.2 million is poor by recent exvessel standards, which have ranged as high as 120 million dollars (Table A.7.). As is the case statewide, prices paid for all salmon, and sockeye salmon in particular, remain depressed (Table A.11.), thereby negatively affecting exvessel values, even in moderate sized salmon runs. Sockeye salmon escapements (see table below) to all five monitored systems in UCI (Westerman & Willette 2003) exceeded established goals, which is the first time since 1985 that this had occurred (Table A.10.).

System	2003 Escapement	Lower Goal	Upper Goal
Crescent River	122,457	25,000	50,000
Fish Creek	92,298	50,000	70,000
Kasilof River	359,633	150,000	250,000
Kenai River	1,181,309	750,000	950,000
Yentna River	180,813	90,000	160,000

Chinook Salmon

The 2003 harvest of 18,486 chinook salmon (Table 4) was nearly 3,400 fish above the long term average harvest (Tables A.1. and A.6.). The two fisheries where chinook salmon are harvested in appreciable numbers occur in the Northern District and the Upper Subdistrict of the Central District. In the Upper Subdistrict set gillnet fishery, the chinook salmon harvest of nearly 15 thousand fish ranks as the 6th highest since 1966. However, age composition analyses revealed that a significant

portion (56%) of the harvest consisted of fish that had spent two years or less in the marine environment (Tobias and Willette 2004). The harvest of younger-aged fish more than doubled the 1987-2002 average for these age classes in this area. The 2003 sonar count of late-run chinook salmon into the Kenai River was 41,659. When the inriver recreational harvest of chinook salmon above the sonar counter is accounted for, a spawning escapement of approximately 30 thousand fish was estimated, well within the BEG for this system of 17,800 – 35,700.

Created by the BOF in 1986, and most recently modified in 2002, the Northern District King Salmon Management Plan allows a minor commercial fishery to occur each May and June for set gillnets in the Northern District. Under this plan a single set gillnet per permit is permissible in the entire Northern District for a 6-hour period (7:00 A.M. to 1:00 P.M.) per week on three consecutive Mondays beginning the first Monday on or after May 25. Each participant is allowed one 35-fathom gillnet and a minimum distance of 1,200 feet must be maintained between nets (twice the normal distance). However, the area from one mile south of the Theodore River to the Susitna River is open to fishing the second regular Monday period only. This is generally the most productive area for harvesting chinook salmon in this fishery. Prior to 2002, fishing was permitted for six hours each Monday in June or until the quota of 12,500 chinook had been harvested or until the regular season opened on June 25. Harvest levels approached or reached the quota in the first years of the fishery, then declined substantially in the early to mid 1990s. When dealing with the annual variation in abundance of Northern District chinook salmon, it had been the policy of the BOF to maintain the balance between user groups, as defined in the management plan, through Department emergency orders. This resulted in one to four periods being fished each year. At the 2002 BOF meeting, the opening date for the Northern District commercial chinook salmon fishery was changed to the first Monday on or after May 25 and was limited to no more than three total periods.

The outlook for the chinook salmon run to Northern District streams was very positive for 2003. In fact, for the past few years chinook salmon stocks in the Northern District have returned in greater abundance than the early 1990's, but the commercial harvest has not increased proportionately. The explanation for the lower than expected commercial harvest of chinook salmon during this time, and especially in 2003, is due to reduced participation in the fishery. In 2003, strong winds out of Turnagain Arm were prevalent on fishing days, which greatly impacts the western shore north of Tyonek, and results in many fishermen remaining on the beach. Harvests from the first three periods in 2003 of 179, 349, and 644 fish, respectively, was not indicative of chinook salmon abundance as some recreational fisheries were liberalized to provide for more opportunity in response to strong chinook salmon runs. The total harvest from the 2003 fishery of 1,172 fish was well below the 1986-2002 average harvest of 5,188 fish, and moderately below the recent 5-year average (1998-2002) harvest of 1,982 chinook salmon (Table 3). Harvests since 1995 have been reduced due to below average runs in 1996 and 1997 and also due to registration requirements that

now prevent most Central District fishermen from participating in this fishery. In 2003, chinook salmon escapement objectives were achieved or exceeded in most surveyed streams. The 2003 exvessel value for chinook salmon in UCI was estimated at \$359,000 - which is approximately 2.9% of the total exvessel value (Table A.7).

Sockeye Salmon

Management of the Upper Cook Inlet sockeye salmon fishery integrates information received from a variety of programs, which together provide an inseason model of the actual run. These programs include Offshore Test Fishing (OTF), escapement enumeration by sonar and weir, comparative analysis of historic commercial harvest and effort levels, and age composition studies. Two additional programs (genetic stock identification and in-district sonar enumeration) are currently not funded and further development is dependent on future funding).

The OTF program employs a chartered gillnet vessel fishing six fixed stations along a transect crossing Cook Inlet from Anchor Point to the Red River delta (Shields and Willette 2004). The program provides an inseason estimation of sockeye salmon run strength by determining fish passage rates (computed by correlating the vessel's daily catch with subsequent commercial harvests and escapement) and fitting these rates to the appropriate historic run-timing profile (Table 1). In 2003, the program was once again conducted aboard the F/V *Corrina Kay*, captained by Roy Self.

Hydroacoustic technology is used to quantify salmon escapement into glacial rivers and was first employed in UCI in the Kenai and Kasilof Rivers in 1968 and expanded to the Susitna River in 1978 and the Crescent River in 1979 (Davis 2002). Operations followed standard procedures in all systems in 2003. An adult salmon weir was operated by ADF&G Sport Fish Division at Fish Creek (Knik Arm) and provided daily escapement counts for this system. The weir on Packers Creek has not been operational since 2000 and therefore no counts were available for this system. This year's sockeye salmon escapement counts for systems can be found in Table 2, while Table A.10. provides historical escapement data.

UCI commercial catch statistics refined to gear type, area, and date are available back to 1966. Currently, all commercially harvested salmon, whether sold or kept for personal use, are recorded on fish tickets and entered into the statewide fish ticket database. The 2003 commercial catch by gear type, area, and date can be found in Tables 3 through 7. Total harvest by statistical area and average catch per permit are reported in Tables 8 and 9. A summary of emergency orders can be found in Table 10 and a summary of fishing periods by gear type and area is summarized in Table 11.

Inseason analyses of the age composition of sockeye salmon escaping the principle watersheds of

UCI provide helpful information in estimating the stock contributions in various fisheries. During the 2003 fishery, approximately 31 thousand sockeye salmon were examined from catch and escapement samples (Tobias and Willette 2004). The age composition of adult sockeye salmon returning to monitored systems is provided in Table 12.

The preseason forecast for the 2003 season projected a run of 3.9 million sockeye salmon, with a harvest estimate (sport & commercial) of 2.4 million fish. The total run to the Kenai River was forecasted to be 2.04 million sockeye salmon, which if realized, would have resulted in an escapement goal target of 750 to 950 thousand fish past the sonar counter at river-mile 19. The UCI actual harvest of 2.8 million sockeye salmon was 26% more than the preseason forecast (Appendix A.14) while the total run of sockeye salmon to UCI (Tobias and Willette 2004) was 61% more than the preseason forecast (see table below). Returns to all systems in UCI were stronger than expected in 2003, with the Kenai River sockeye salmon run approximately 81% greater than the preseason forecast.

System	Forecast	Actual	Difference
Crescent River	115,000	156,000	+36%
Fish Creek	125,000	175,000	+40%
Kasilof River	677,000	1,004,000	+48%
Kenai River	2,044,000	3,700,000	+81%
Susitna River	397,000	613,000	+54%
Overall Total	3,862,000	6,220,000	+61%

Sockeye salmon prices at the beginning of the season averaged \$0.55 to \$0.60 per pound. Typically this price is adjusted upwards by the end of the season, but for the past few years prices have not changed dramatically from the beginning of the year to the end of the season (Table A.11.). The total exvessel value in UCI for sockeye salmon was \$11.6 million, which was 95% of the total UCI exvessel value for salmon (Table A.7.).

The first commercial sockeye salmon fishery to open in UCI in 2003 was the Big River fishery. Operating under the Big River Sockeye Salmon Management Plan, which was adopted in 1989, a small set gillnet fishery takes place in June in the northwest corner of the Central District. Between June 1 and June 24 fishing is allowed each Monday, Wednesday, and Friday from 7:00 A.M. to 7:00 P.M. Permit holders are limited to a single 35-fathom gillnet and the minimum distance between nets is 1,800 feet, which is three times the normal separation. Targeting an early run of sockeye salmon returning to Big River, this fishery also encounters chinook salmon migrating

through the area. The management plan for this fishery limits the harvest of chinook salmon to no more than 1,000 fish; in recent years however, harvests have been well below that level. The 2003 fishery began on June 2 and yielded a total catch of approximately 5,300 sockeye salmon and a chinook salmon harvest of 475 (Tables 3 and 4). Effort was light, with just six permits making landings at the peak of the fishery, as compared to past years where effort levels peaked at as high as 33 permits.

The next significant fishery to open that harvests sockeye salmon was the set gillnet fishery in the Western Subdistrict of the Central District. Harvesting sockeye salmon bound primarily for the Crescent River, this fishery opens on the first Monday or Thursday, on or after June 16th. The fishery has a regular schedule of two twelve-hour weekly fishing periods throughout the season, unless modified by emergency order. Following a period of record runs in the mid-1980's, the Crescent River sockeye salmon run fell off sharply, resulting in closures of the local set gillnet fishery and a closure of the southwest corner of the Central District to drift fishing. These restrictions were implemented in order to achieve established escapement goals. As a result of the poor runs to Crescent Lake, a limnological investigation was initiated in an attempt to identify sources that were contributing to the decline in adult production. The limnology studies compared previously collected data with an assessment of more recent information, including an evaluation of zooplankton abundance, light penetration, and adult sockeye salmon escapement levels. Unfortunately, these studies were terminated in 2001 due to lack of funding; however, within the limited scope of the investigation, a hypothesis was developed that identified one possible mechanism for the diminished runs as increased turbidity levels in Crescent Lake, which in turn caused a decline in primary and secondary productivity (Edmundson and Edmundson 2002). The exact cause for the shift in turbidity could not be isolated before the project was terminated, but as a result of these studies, the BEG for this system was reduced beginning in 1999. By 2001, the depressed zooplankton populations had revealed a slight improvement, but the short-term outlook for sockeye salmon production from this system remains uncertain. Commercial harvest data and escapement levels into Crescent River in 2003 were strong enough early in the season that it soon became apparent that the lower end of the escapement goal was assured and continuous fishing was allowed 24 hours per day in the set gillnet fishery in the Western Subdistrict south of Redoubt Point from June 30 until August 1 (Table 10). The harvest from this area was approximately 35 thousand sockeye salmon (Table 8). However, due in large part to declining runs and previous closures to the fishery, few permit holders participated, so even though fishing time was extended for all of July and into August, the upper end of the escapement goal was exceeded by more than 72 thousand sockeye salmon. The final escapement into Crescent Lake was 122,457.

In February 2002, the BOF made substantial changes to the management plans that govern the commercial sockeye salmon set gillnet fishery in the Upper Subdistrict of the Central District. The early part of the season is now managed in compliance with the Kasilof River Salmon Management

Plan (5AAC 21.365). In the Kasilof Section, set gillnetting opens on the first regular period on or after June 25. From June 25 through July 7 the Department is limited to no more than 48-hours of additional fishing time per week (Sunday through Saturday) through emergency order and also is required to close the fishery for 48 consecutive hours per week. Beginning July 8, the Kasilof Section is managed in combination with the Kenai and East Forelands Sections. Specifically, from July 8 through July 20, or until an assessment of the Kenai River sockeye salmon run strength has been made, the Department may not allow more than 24-hours of additional fishing time by emergency order per week in the Upper Subdistrict. There are no mandatory window closures until an assessment of the run projects that more than two million Kenai River sockeye salmon will enter the river. If necessary, the Department may limit regular and additional fishing time during this period to within ½ mile of the shoreline in the Kasilof Section if the Kenai and East Forelands Sections are not open for the fishing period. If the Kenai River sockeye salmon run strength is determined to be less than two million fish, and the Department feels that the Kasilof River OEG of 300 thousand may be exceeded, an additional 24-hours of fishing time per week may be allowed within ½ mile of the shoreline in the Kasilof Section after July 15.

The amended Kenai River Late-Run Sockeye Salmon Management Plan (5AAC 21.360) states that beginning July 20, or after a Kenai River sockeye salmon run strength assessment is made, three options are available for management of the set gillnet fishery in the Upper Subdistrict. First, if the Kenai River sockeye salmon run is less than two million fish, there may be no more than 24-hours of additional fishing time per week in the Upper Subdistrict. If the Kenai and East Forelands Sections are not fished during regular or additional openings, the Department may limit regular and additional periods in the Kasilof Section to within ½ mile of the shoreline. There are no mandatory window closures on Kenai River sockeye salmon runs of less than two million fish. The second management option is for Kenai River runs of between two and four million sockeye salmon. In this scenario, the Department may allow up to 36-hours of additional fishing time per week and will also close the Upper Subdistrict set gillnet fishery for 48 consecutive hours per week. If the Kenai and East Forelands Sections are not open, the Department may limit regular and extra periods in the Kasilof Section to within ½ mile of the shoreline. Finally, for Kenai River sockeye salmon runs exceeding four million fish, the Department may allow up to 60-hours of additional fishing time per week and will close the Upper Subdistrict set gillnet fishery for 36 consecutive hours per week. Again, if the Kenai and East Forelands Sections are not fished, the Department may limit regular and extra periods in the Kasilof Section to within ½ mile of the shoreline.

In 2003, the Kasilof Section opened to set and drift gillnetting on Thursday, June 26, per the Kasilof River Management Plan. Because the fishery was closed until that date, the 48-hour mandatory closure was fulfilled for the week. Escapement levels into the Kasilof River had already exceeded 55 thousand by June 27, which resulted in two 24-hour emergency orders being issued to extend set

gillnetting in the Kasilof Section from Thursday, June 26 at 7:00 p.m. until Saturday, June 28 at 7:00 p.m. (Table 10). Extra fishing time outside of regular periods for drift gillnetting can only be granted in the Kenai and Kasilof “corridors” and standard practice limits drift gillnetting to daylight hours as darkness precludes enforcement of the offshore boundary. Drift gillnetting was thus extended to the Kasilof corridor on Thursday, June 26, from 7:00 p.m. until 11:00 p.m. and on Friday, June 27, from 5:00 a.m. until 11:00 p.m. and again on Saturday, June 28, from 5:00 a.m. until 7:00 p.m. The sockeye salmon harvest during this first period (June 26-28) was approximately 88,500 fish, with set gillnets taking 82 thousand and the drift fleet harvesting 6,500. Both drift and set gillnets fished their regular 12-hour period on Monday, July 1, prior to being closed for 48 consecutive hours in compliance with the new management plan. After Thursday’s (July 3) regular period, both set and drift gillnets were extended for the same time period and area as the previous week, which in this case meant through Saturday, July 5, at 7:00 p.m. The harvest from this three-day period was approximately 171 thousand sockeye salmon, with set gillnets taking 113 thousand and the drift fleet harvesting a little more than 58 thousand. On Thursday, July 3, fish tickets showed that 245 boats participated in the fishery, averaging 221 sockeye salmon per boat, which was an average harvest for this time in July. The Kasilof River sockeye salmon escapement had surpassed 113 thousand fish by the time the Kenai Section opened on July 8.

Per the management plans, the Kenai and East Forelands Sections opened as scheduled on Monday, July 8. The preseason forecast of 2.04 million sockeye salmon to the Kenai River, if realized, would mean that an inriver sonar goal range of 750 to 950 thousand fish would be the target. The drift gillnet harvest for July 7 was nearly 160 thousand sockeye salmon, with 313 boat deliveries averaging 511 sockeye salmon per boat, which was a stronger than expected harvest for the run as forecast. By July 9, the Kasilof River sockeye salmon escapement had exceeded 125 thousand fish, well ahead of where it needed to be to stay within the BEG range of 150 to 250 thousand. Therefore, an emergency order was issued for set gillnetting in the Kasilof Section on July 9 for eight hours, but only within ½ mile of the shoreline, which was in compliance with the new management plan that limited fishing to this area if the Kenai and East Forelands sections were not fished. Kenai River sockeye salmon escapement had only reached 43 thousand by July 9, which was too early to make an accurate assessment of the strength of the run. Thus, the Kenai Section was not open for additional fishing time on July 9.

The first mandated drift restriction to the Kenai and Kasilof Sections (“the Corridor”) was executed during the July 10 regular period. The harvest from this corridor period produced average to above average results, with a CPUE of more than 435 sockeye salmon per boat. Set gillnetters fished their regular period in the Upper Subdistrict on Thursday, July 10 with a harvest of more than 119 thousand sockeye salmon. By July 11, escapement counts of sockeye salmon into the Kenai River had only reached 78 thousand fish, so the 16 hours of additional fishing allowed on July 12 was

again limited to the Kasilof Section within ½ mile of shore per management plan guidelines. The harvest from this period was approximately 46 thousand. On Monday, July 14, the drift fleet was held south of the latitude of the Blanchard line for the purpose of reducing exploitation on northern bound sockeye salmon stocks. The CPUE of more than 1,000 sockeye salmon per boat from this period indicated that a significant body of fish was resident in the inlet. The combined harvest from set and drift gillnets on July 14, was approximately 493 thousand sockeye salmon, which again was somewhat stronger than expected for a forecasted run. By this time, escapement into the Kasilof River had already surpassed 200 thousand and it was apparent that without extra fishing time, the upper end of the OEG of 300 thousand sockeye salmon would be exceeded. Because the Upper Subdistrict set gillnet fishery was still being managed for a Kenai run of less than two million sockeye salmon, the 24-hour limitation on emergency order hours per week remained in effect; however, the management plan did allow for an additional 24-hours of fishing time per week in the Kasilof Section after July 15 if the OEG of 300 thousand was projected to be exceeded and the Kenai River sockeye salmon total return had not exceeded two million. Therefore, in an attempt to slow down the escapement rate into the Kasilof River, two emergency orders were issued for set gillnetting in the Kasilof Section within ½ mile of the shoreline from Wednesday, July 16, at 8:00 a.m. until the start of the regular period on Thursday, July 17 (23 hours). The regular period on July 17 was fished as scheduled (with a 3-hour extension until 10:00 pm in the full Upper Subdistrict set gillnet fishery and a 3-hour extension for drifting in the Kenai and Kasilof Sections) with a harvest of approximately 650 thousand sockeye salmon from both fisheries combined. This turned out to be the peak period for the year as far as the combined harvest of sockeye salmon from both fisheries was concerned. From July 16-18, nearly 300 thousand sockeye salmon escaped the Kenai River, bringing the yearly total to 428 thousand, while the Kasilof River escapement level had already exceeded the upper end of the BEG escapement goal range of 250 thousand. Thus, all allowable hours left in the management plan for the week were utilized for set gillnetting in the Upper Subdistrict on Friday, July 18 (10 hours), and Saturday, July 19 (9 hours), with an additional 17 hours (new management week) of fishing used on Sunday, July 20. During the same time period, 31 hours of drift gillnetting was fished in the Kenai and Kasilof Sections of the Upper Subdistrict.

The regular period was fished on Monday, July 21, with a 5-hour extension of set gillnetting in the Upper Subdistrict, while drifters were allowed four additional hours in the full corridor. On Tuesday, July 22, the Department issued their formal analyses of the sockeye salmon run, using OTF data combined with total harvest and escapement levels to date. Based upon the OTF top five best fits of the current year's run to previous year's runs, a total sockeye salmon run estimate of 6.5 to 9.8 million was made (Shields and Willette 2004). Of the total return, the Kenai component of the run was estimated at 3.4 to 5.4 million. With the size of the Kenai River run now projected in the two to four million range, a different component of the management plan became active. Under the new guidelines, the Department could allow up to 36-hours of additional fishing time per week

in the Upper Subdistrict set gillnet fishery, but also must close the fishery for 48 consecutive hours per week. In addition, as a result of the return having more than two million Kenai River sockeye salmon, the dipnet fishery at the mouth of the Kenai River was liberalized to 24-hours per day and the inriver sport fish bag limit was also liberalized from three fish per day to six fish per day, in compliance with the Upper Cook Inlet Personal Use Salmon Fishery Management Plan (5AAC 77.540) and the Kenai River Late-Run Sockeye Salmon Management Plan.

Because the management plans required a mandatory 48-hour closure of the Upper Subdistrict set gillnet fishery, a very difficult situation faced department staff. The Kasilof River sockeye salmon BEG had already been exceeded and by midnight of July 22 the Kenai River sonar estimate had climbed to nearly 725 thousand fish, with more than two weeks of escapement still to occur. First, all of the remaining hours in the management plan for set gillnetting in the Upper Subdistrict were used on Wednesday, July 23. Then, after consultation with the commissioner's office, it was decided that additional fishing time would be allowed in the Upper Subdistrict set gillnet fishery as well as an extra 12-hour period in the full inlet for the drift gillnet fishery, which occurred on Friday, July 25. A total of 58 hours of extra fishing time was issued for the week in the set gillnet fishery, which was 22 hours outside of the management plans, while one 12-hour extra period was issued for drift gillnetting in the entire inlet. Moreover, to add complexity to the whole state of affairs, the Northern District Salmon Management Plan (5AAC 21.358) also directed the department to restrict drift gillnetting to the corridor for two consecutive periods from July 16 to 31. There were provisions in the plan for some relaxation of these restrictions, but only if the following criteria were met: the Kenai River sockeye salmon run strength was projected to be three million fish or more; sockeye salmon escapement goals were being met in the Kenai, Yentna, and Kasilof Rivers; the abundance of pink, chum, and coho salmon stocks were sufficient to withstand a commercial harvest; and that any additional commercial harvest of coho salmon would not prevent the sport and guided sport fishery from having a reasonable opportunity to harvest coho salmon over the entire run, as measured by the frequency of inriver restrictions. The relaxation of the two consecutive drift gillnet periods required to be fished in the corridor from July 16-31 included an allowance for fishing an area of the inlet south of the latitude of Kalgin Island as well as a "box" area east of Kalgin Island. Because the aforementioned criteria were judged to have been met, based on the fact that the Kenai River sockeye salmon run was now projected to meet or exceed three million fish, sockeye salmon goals had all been achieved or exceeded, and pink, chum, and coho salmon indicators were all positive, drift gillnetting for the regular period on Thursday, July 24, was restricted to an area south and east of Kalgin Island. Drift gillnetting was also allowed in the full corridor on Saturday, July 26 for 18 hours. Set gillnetting in the Upper Subdistrict was not open for this period because all extra fishing outside of regular periods allowed for in the management plans had been used for the management week. By the end this management week (Saturday, July 26), sockeye salmon escapement levels in the Kasilof River were more than 310 thousand, while in the Kenai River they had surpassed 900 thousand at the sonar counter. Crescent

River sockeye salmon escapement had reached 109 thousand (goal range of 25 to 50 thousand); Yentna escapement was 147 thousand (goal range of 90 to 160 thousand); and Fish Creek had reached 32 thousand (goal range of 20 to 70 thousand). The total UCI sockeye salmon harvest by this time had reached 3.2 million, well beyond the preseason forecast for a commercial harvest of approximately 2.0 million.

On Sunday, July 27, which was the beginning of a new management week, set gillnetting in the Upper Subdistrict was open for 12 hours, while drift gillnetting was open for 12 hours in the Kenai and Kasilof corridor. On Monday, July 28, drift gillnetting was again restricted to the area described above, which was south and east of Kalgin Island. No extensions were given drift or set gillnetting for this regular period. However, for the remainder of the season, drift gillnetting was allowed in the Kenai and Kasilof Sections for 18 hours each day (other than regular periods) and on regular periods there were 4-hour extensions granted in the full corridor. In summary, 18-hour corridor periods were fished on July 29 & 30, August 1, 2, 3, 5, & 6. The regular periods on July 31 and August 4 were extended for four hours in the corridor and on August 7 one hour of corridor fishing was allowed prior to the opening of the regular period. For all periods where drift gillnetting was allowed while set gillnetting was closed, those waters within one mile of the mean high tide mark north of the Kenai River and within one and one half miles of the mean high tide mark south of the Kenai River were closed to drift gillnets.

For the management week of July 27 to August 2, important decisions again had to be made with regard to management plan restrictions on extra fishing time and the 48-hour window required per week for set gillnetting in the Upper Subdistrict. By Wednesday, July 30, all 36-hours of additional fishing time allowed by management plan per week had been used. After the regular period on Thursday, July 31, the commissioner's office abided by the restrictions in the management plans, not allowing additional fishing time for set gillnetting in the Upper Subdistrict, and therefore the 48-hour window period was met by not fishing the rest of the week. Through midnight on July 31, sockeye salmon escapement levels had reached the following: 1,033,715 (Kenai River), 337,593 (Kasilof River), 118,612 (Crescent River), 164,272 (Yentna River) and 58,325 (Fish Creek). Except for Fish Creek, all these counts had exceeded the upper end of established escapement goal ranges.

The final management plan that came into play for the commercial salmon fishery for 2003 was the Kenai River Coho Salmon Conservation Management Plan (5AAC 21.357). This plan allowed for only one emergency order, not to exceed 24 hours in duration, to be issued in August for Upper Subdistrict set gillnets. Thus, an emergency order was issued for set gillnetting in the Upper Subdistrict from 7:00 a.m. Sunday, August 3, until 7:00 a.m. on August 4, which was the start of the last regular period that could be fished for the year, as this management plan also closed fishing no

later than August 7. Again, as stated above, drift gillnetting was open in the Kenai and Kasilof corridor for 18 hours each day for non-regular periods. The last day of fishing for drift gillnetting was Thursday, August 7.

This was the fifth year of managing for a sockeye salmon escapement goal target in the Kenai River based on the abundance of the run to this system. It marked the first time during this period that the inriver escapement goal range did not change during the season from the preseason forecast. The preseason forecast was for a total run to the Kenai River of 2.04 million sockeye salmon, which meant that an escapement goal range of 750 to 950 thousand fish would be the final target. The total sockeye salmon run to UCI in 2003 was estimated at 6.3 million, with 3.8 million being of Kenai River origin (Tobias and Willette 2004). However, due to management plan restrictions regulating the amount of fishing time in the ESSN and drift gillnet fisheries, and also due to a run much larger than the preseason forecast, the total sonar estimate of sockeye salmon escapement in the Kenai River was nearly 1.2 million. The final Kasilof River sonar estimate was approximately 360 thousand fish, which was the second largest escapement ever recorded for this system, and marked the sixth time in the last seven years that the upper end of the BEG range for this system was exceeded.

The Northern District set gillnet fishery opened for regular periods starting on June 26. The Northern District Salmon Management Plan requires the drift gillnet fleet to be restricted to the Kenai and Kasilof Sections (corridor fishing) of the Central District for one regular period between July 9 and 15 in order to pass sockeye salmon into the Northern District. In 2003, the first drift gillnet corridor restriction occurred on July 10. However, because the sockeye salmon escapement goal at the Yentna River had not been achieved for the previous two years, the next regular period for the drift fleet (July 14) was also restricted to an area of the Central District south of the latitude of the Blanchard Line (Tables 10 and 11). This was done in order to pass sockeye salmon that were not harvested from the July 10 restriction, and still resident in the northern part of the Central District, into the Northern District. The escapement count at the Yentna River on July 14 had reached nearly 23 thousand fish, or one of the highest counts ever achieved by this date. Significantly, by this date none of the fish saved from the two drift gillnet restrictions had made it to the Yentna River sonar enumeration site yet. By midnight of July 20, the minimum escapement goal had nearly been achieved, and from July 19 to July 22, approximately 65 thousand sockeye salmon were enumerated at the Yentna River sonar site.

For many years in the Northern District, additional restrictions other than those directed at drift gillnetting in the Central District have been required to ensure achieving the escapement goal in the Yentna River. However, in 2003, it soon became apparent that the minimum escapement goal would easily be achieved and serious consideration was given to providing extra fishing time to Northern District set gillnetters in order to harvest fish excess to escapement needs. The

difficulty with this decision involved understanding the time that it takes sockeye salmon to transit the Northern District and be counted at Yentna station. It wasn't until late-July that a projection could be made showing that the upper end of the escapement goal might be surpassed without extra fishing effort. But, by this time it was felt that nearly all of the sockeye salmon that were going to escape the Yentna River had already transited the Northern District and any extra fishing time allowed would produce small sockeye salmon catches and increasing coho salmon harvest. Thus, no extra time was allowed outside of regular periods. The final escapement in the Yentna River was estimated at more than 180 thousand sockeye salmon, or the largest count observed in this system since counting began in 1981.

The commercial harvest of sockeye salmon in the Northern District has tapered off significantly the past five years, with an average annual catch of approximately 50 thousand fish compared to the average harvest for the five years previous to that of more than 115 thousand fish. The explanation for the downturn in harvest levels can be attributed to smaller sized runs, but it is also due to the fact that fewer fishermen are participating in this fishery as a result of lower exvessel prices and a lack of tendering services.

The commercial fishery targeting Fish Creek sockeye salmon stocks in Knik Arm was closed by the BOF prior to the 2001 season. This system has been sporadically enhanced since 1976, yet from 1998-2001 the minimum escapement goal was not achieved. However, at the 2002 BOF meeting an escapement goal review team recommended that the Fish Creek goal be changed to an SEG of 20,000-70,000. Ironically, the escapement counts in 2002 & 2003 have both exceeded 90,000 sockeye salmon, but the forecast for the run in 2004, if achieved, will not provide for the minimum escapement objective to be achieved.

Coho Salmon

The 2003 commercial coho salmon harvest of approximately 102 thousand (Table A.3.) represents the lowest harvest since 1972 and less than half of the previous 10-year average annual harvest. Commercial coho salmon harvests in UCI during the 1980's and early 1990's were much higher than the long term average due to good coho production, and also due to strong sockeye salmon runs to Upper Cook Inlet, which resulted in additional fishing time, especially in the Central District. However, as with pink and chum salmon, recent coho salmon harvest statistics may not be a true indication of run strength, largely due to regulatory changes that dictate how the fishery is prosecuted. Since 1996, BOF regulations have reduced fishing time for the drift fleet in the Central District and eliminated additional fishing time directed at coho and sockeye salmon surpluses in the Northern District and Kalgin Island subdistricts. A special BOF meeting in 2000 further restricted both sport and commercial fisheries targeting coho salmon, with the commercial set gillnet fishery in the Upper Subdistrict now closing no

later than August 7 and no more than one emergency order, not to exceed 24 hours in duration, is allowed in the entire month of August. All of these actions have resulted in marked reductions in the commercial coho salmon exploitation rate. Therefore, gauging the strength or weakness of coho salmon stocks based entirely on commercial harvest statistics may be misleading. However, the Department has developed a method to be able to project whether or not an aggregate of coho salmon escapement goals in the Northern District are likely to be met, based upon an analysis of drift gillnet CPUE. In 2003, this analysis projected that the aggregate coho salmon escapement goal would likely be achieved. Post-season escapement data reveal that the analysis was correct.

Although the 2003 coho salmon run was described as a mediocre, no restrictions were implemented to any of the commercial fisheries in UCI outside of those mandated by management plans. The exvessel value of coho salmon from the commercial fishery was approximately \$132 thousand or 1.1 percent of the total exvessel value (Table A.7.).

Pink Salmon

The 2003 UCI harvest of approximately 49 thousand pink salmon was a little less than the average annual odd-year harvest of pink salmon since 1990 (Table A.4.). Again, there is difficulty in assessing the true run strength of pink salmon in UCI based on catch statistics, especially considering the significant restrictions to set gillnetting in the Upper Subdistrict in August. Pink salmon escapements are not monitored in Upper Cook Inlet to an appreciable degree; however, it appears that many river systems in 2003 received average runs of pink salmon for an odd-year return. The average price paid for pink salmon in 2002 was \$0.03 to \$0.05 per pound, resulting in an exvessel value for this species of \$8,700 or 0.1% of the total exvessel value (Table A.7.).

Chum Salmon

As a result of the floods of 1986, chum salmon production in much of southcentral Alaska was negatively affected, with commercial harvests since that time well below the long-term average annual harvest of 531 thousand (Table A.5.). However, beginning in 1995 improvements in chum salmon runs have been observed, with the 2000-2002 runs being quite strong. The 2003 run of chum salmon to UCI was likely smaller than the previous three years, with a commercial harvest of approximately 120 thousand, although this was not significantly different than the average annual harvest from the previous five years of 144 thousand. However, as already mentioned for other stocks, comparing recent harvest statistics to historical averages for the purpose of making assessments of stock strength, can be misleading because of how much

differently the commercial fishery is now prosecuted. Nevertheless, while the total run of chum salmon is not quantifiable, the 2003 return of chum salmon appears to have been slightly less than the 2000-2002 runs. This observation can be somewhat corroborated by noting that the 2002 escapement counts of chum salmon observed in the Little Susitna River, Willow Creek, and Wasilla Creek were the highest counts ever observed for these systems.

Fishermen were paid an average price of \$.12 per pound for chum salmon (Table A.11.), producing an exvessel value of approximately \$100,000 – which was just 0.8% of the overall exvessel value of the 2003 fishery (Table A.7.).

Price, Average Weight and Participation

In general, prices paid to fishermen for their catch in 2003 was very similar to what they received in 2002, with both year's prices much lower than previous years (Appendix A.11). In fact, the average price paid for sockeye salmon of \$0.60 per pound was the lowest average price since 1975. In most years, the price paid for fish rises by the end of the season, but did not occur this year due to various market factors, including competition from farmed fish and losses recorded by processors from previous year's operations. Chinook, coho, pink and chum salmon were sold for \$0.95, \$0.20, \$0.05 and \$0.12 per pound, respectively, which represent reductions for all species from previous year's averages. It should be noted that these averages are generated from inseason grounds prices and do not reflect any post-season adjustments.

As determined from fish ticket calculations, the average weight by species was somewhat smaller than the long-term average for chinook and sockeye salmon, but approximately the same as the long-term mean for coho, pink, and chum salmon (Table 13, Appendix A.12). Chinook salmon averaged 20.4 pounds, which is more than six pounds less than the long-term average. In both 2001 and 2003, catch sampling revealed very strong marine age-2 fish in the harvest. It is unknown at this time if the increase in the percentage of younger fish in the harvest is an anomaly or if it is a trend. Sockeye salmon averaged only 5.6 pounds per fish, which along with 1985 and 1991, represents the smallest average size since 1969. Of special note as far as average weights go, is the fact that last year's average size of 6.4 pounds per sockeye salmon was the largest average in the last 10 years. The average weight for coho, pink and chum salmon were 6.5, 3.6, and 6.9 pounds, respectively.

The Commercial Fisheries Entry Commission issued 572 drift gillnet permits (70% to Alaska residents) and 742 set gillnet permits (83% to Alaska residents) for the Cook Inlet area in 2003 (Appendix A.13). A total of 29 firms purchased Upper Cook Inlet fishery products during 2003, with the major buyers listed in Table 14.

Salmon Enhancement

Salmon enhancement through hatchery stocking has been a part of UCI salmon production since the early 1970's. Presently, only a single commercially oriented hatchery remains operational in Upper Cook Inlet – the Trail Lakes facility located in the upper Kenai River drainage near Moose Pass. Trail Lakes hatchery was originally built and operated by the Department's Fisheries Rehabilitation, Enhancement and Development (FRED) Division, but was subsequently leased to Cook Inlet Aquaculture Association (CIAA) in 1990 as the state-operating budget declined. This hatchery has functioned to produce primarily sockeye salmon, with minor production of coho and chinook salmon. Located on the Kenai Peninsula, both Hidden Lake and Tustumena Lake are stocked with sockeye salmon, with adult production from these enhancement programs available to both the common property commercial fishery and the personal use and recreational fisheries. All of the sockeye salmon that are released from this facility are otolith marked and smolt and adult enumeration programs are conducted by CIAA staff at both systems. In general, hatchery-produced sockeye salmon have accounted for substantially less than 10 percent of the total commercial harvest.

Stock Status and Outlook

On the whole, UCI salmon stocks remain in good condition, although several areas merit some discussion. A run of 3.9 million sockeye salmon was forecast to return to Upper Cook Inlet in 2003, with a harvest expectation from the commercial fishery of approximately 2.0 million. However, there was a level of uncertainty with the run forecast to the Kenai River. The fry model used to forecast the return of age 1.3 sockeye salmon had provided more accurate forecasts than the sibling model in five of the previous six years. But, the difference between the forecast return of age 1.3 sockeye salmon using the fry model (957 thousand) and the sibling model (2.6 million) was large. In reality, the total run to UCI in 2003 of approximately 6.2 million sockeye salmon was nearly 1.5 million more than the outlook for the year. The estimate of Kenai River age 1.3 sockeye salmon in the run was nearly 2.4 million, or very close to what the sibling model had projected. The sockeye salmon run to all systems in UCI was stronger than forecast, with the Kenai River run nearly 81% higher than expected. All established escapement goals for sockeye salmon in UCI were exceeded in 2003 (Appendix A. 10), which was the first time this had occurred since 1985.

After experiencing record-level runs through the mid to late '80's, the Crescent River sockeye salmon run declined dramatically and remained depressed throughout the 1990's. In 1996, limnological studies were initiated to determine whether the decline in sockeye salmon production was related to changing conditions in Crescent Lake, the major nursery lake in this watershed. These studies revealed a low abundance of the primary food resource for juvenile sockeye salmon in Crescent Lake, namely, the cyclopoid copepod *Cyclops scutifer* (Edmundson and Edmundson

2002). As a result of these findings, the BEG for this system was reduced in 1998 from 50,000-100,000 to the current 25,000-50,000 range. After the 2000 season, and before the causes of the decline in *Cyclops* abundance could be more precisely defined, the limnological studies were terminated because of budgetary constraints. While not able to clearly identify the mechanisms leading to the decline in zooplankton production, the limnology studies did provide further insight. First, it is possible that that increased turbidity levels in the lake prior to 1996 resulted in a reduction in primary production associated with a lack of light penetration in the lake. Another possible source of the decline in production was attributed to a top-down grazing effect on the *Cyclops* population from sockeye salmon fry produced from large escapements beginning in 1999. In speculating on the mechanisms responsible for the reduced sockeye salmon runs to this system, Edmundson and Edmundson (2000) cited that it is likely some combination of increased turbidity and over-grazing of the forage base.

Since 2000, sockeye salmon runs to Crescent Lake have improved somewhat. The 2003 sonar estimate of sockeye salmon escapement into Crescent Lake of more than 122 thousand fish was the second largest escapement ever observed since escapement monitoring began in 1979. The total run estimate of 156 thousand was the eighth largest since 1976; however the 2003 harvest estimate of 33 thousand Crescent Lake sockeye salmon was just the 16th largest during this same time period (see table below). The current low exploitation rates are a result of many fishermen and nearly all processors abandoning this fishery during the 1990's due to diminished returns and considerable restrictions placed on the fishery in order to achieve escapement goals. At the time this report was being published, proposed legislative reductions to the state operating budget put the Crescent River sockeye salmon sonar enumeration project in jeopardy for the 2004 season.

Crescent River Sockeye Salmon		
Decade	Average Annual Total Run (thousands)	Average Annual Commercial Harvest (thousands)
1976 - 1979	130	56
1980 - 1989	169	81
1990 - 1991	73	23
2000 - 2003	113	32

Much like the story at Crescent Lake, sockeye salmon runs to Fish Creek, which drains Big Lake and flows into Knik Arm, have been relatively poor, particularly from 1998 to 2001. The average annual total sockeye salmon run to Big Lake from 1980 to 1997 was 212,414; however, from 1998-2001 the average annual return fell to 52,192 (Tobias and Willette 2004) and during this time period the sockeye salmon escapement goal of 50 thousand was not achieved. But, in 2002 and 2003, escapement into this system exceeded the new SEG range of 20 to 70 thousand fish by

approximately 20 thousand fish each year. In addition, the total sockeye salmon run to Fish Creek in 2002 was more than 134 thousand fish, and in 2003 it exceeded 147 thousand fish.

A technical review assessing Big Lake sockeye salmon production was completed prior to the 2002 BOF meeting (Litchfield and Willette 2002). This report proposed two likely causes for the decline in sockeye salmon production: (1) degradation of spawning habitat as a result of questionable hatchery practices and (2) placement of a coffer dam at the outlet of the lake, which prevented fry from being able to recruit into the lake and allowed a productive spawning area at the lake outlet to be filled in with silt and mud. At the 2002 BOF meeting, Fish Creek sockeye salmon were found to be a stock of yield concern and the Department proposed additional studies to more clearly define the causative agents affecting sockeye salmon production in this system. The long-term outlook for Big Lake sockeye salmon is unknown, but due to reductions in fry stocking associated with IHN outbreaks at Trail Lakes Hatchery, the forecasted return for the next couple of years is quite pessimistic. Since 1976, this system has been stocked with fry raised in Big Lake, Eklutna, or Trail Lakes hatcheries. The stocking rate has been as high as 15 million fry in 1985 and as low as 200,000 fry in 1998; however, there were no fry stocked in 2000 due to an IHN outbreak in the hatchery. CIAA enumerated the sockeye salmon smolt emigration from Big Lake in the spring of 2002 (Dodson 2003) and counted only 49 thousand fish. Based upon a 15% smolt to adult average survival rate, less than 7,500 adults could be expected to return from this smolt production. In fact, the forecast for 2004 projects a total run to Fish Creek of only 33,000 fish, which is significantly less than the past two years. CIAA again enumerated the smolt emigration in 2003 with a count of approximately 117 thousand smolt (Gary Fandrei, personal communication). It is unknown though how many smolt actually emigrated the system. In 2002, there was a period of a week to 10 days at the beginning of the project where no smolt emigrated Big Lake, but in 2003, when the project began on nearly the same date, the first day of counting produced more than one thousand smolt. The parent year for the 2003 emigration was 2001, in which approximately 43 thousand adults were enumerated in the escapement and in 2002 CIAA stocked nearly 4 million sockeye salmon fry. Therefore, an emigration of only 117 thousand smolt, if accurate, would have meant very poor production from both wild and enhanced fish.

Sockeye salmon runs to the Susitna River drainage have also been somewhat depressed recently, with the average annual Yentna River escapement for the five years previous to 2003 of approximately 100 thousand fish, which represents the bottom end of the escapement goal range for this system during that time. However, the total sockeye salmon run to the Susitna River drainage in 2003 of 603 thousand fish (Tobias and Willette 2004) was the second largest in the past 10 years and exceeded the previous two years total runs combined. The forecast for 2004 projects a total run of approximately 465 thousand fish, which is about equal to the recent 10-year (1994-2003) average of 452 thousand fish. Sockeye salmon production in the Susitna River drainage has been

sporadically studied for the past 25 years. For more details, see Tarbox and Kyle 1989; Kyle et al. 1994; King and Walker 1997; Edmundson et al. 2000; and Todd et al. 2001.

Pink salmon runs in UCI are even-year dominant. The 2000 and 2002 runs were characterized as strong or very strong, thus reversing the trend of diminished returns realized since the flood in 1986. This depiction of pink salmon runs is based upon commercial fish reports, recreational fishing success, and limited escapement monitoring. There are no enumeration projects in all of UCI designed to specifically monitor pink salmon escapements, but they are counted as part of programs designed to enumerate chinook, sockeye, and coho salmon. In these systems the 2000 and 2002 data revealed very robust pink salmon escapements. Based upon this minimal amount of escapement data and commercial harvest statistics, which are limited in scope due to the inconsistent manner in which the fishery has been prosecuted, the pink salmon run in 2004 is generally expected to be average or above average in abundance.

Chum salmon production suffered through about a decade of mediocre runs, beginning in the mid-1980's, in part due to impacts from fall flooding in the Susitna River Basin in 1986, but in all probability also due to poor general environmental factors. Chum salmon stocks throughout southcentral Alaska have mirrored Susitna River chum salmon production, both revealing reductions in chum salmon abundance from the mid-1980's to the mid-1990's. Fortunately, since 1995 a steady improvement in chum salmon production has been observed in many areas of South Central Alaska, including UCI. Indications from the OTF project, the commercial fishery, and the few escapement programs where chum salmon are enumerated indicated the 2000-2003 runs were much improved from those realized during the 1990's. While ADF&G lacks quantitative escapement information, chum salmon escapements to streams throughout UCI have undoubtedly been augmented by management actions or regulatory changes aimed principally at other species. These actions include significant reductions in the offshore drift gillnet and Northern District set gillnet fisheries to conserve Yentna River sockeye salmon; the adoption of a Northern District Coho Salmon Management Plan, which further limits these two fisheries to allocate coho salmon for other users; the lack of a directed chum salmon fishery in Chinitna Bay; and finally, harvest avoidance, as much as possible, by the drift fishery as a result of the current low prices being paid for chum salmon. In recent years, chum salmon runs to Chinitna Bay have been essentially unexploited as the local set gillnet fishery has been inactive due to poor prices and also due to no tendering service from any processor. Aerial and foot surveys of chum salmon escapement are conducted during August and September on two drainages in Chinitna Bay, namely, Clearwater and Fitz Creeks. Peak counts from each year can provide indices to escapement trends. In 2003, however, water levels were very turbid, as well as being much lower than normal, which affected aerial census counts in these streams. Thus, the 2003 estimates should be considered minimums, as an unknown number of fish could not be seen from the air. Even with the poor conditions, the Fitz Creek peak count was estimated at

2,000 chum salmon, which was the third highest count ever observed there, while the peak count at Clearwater Creek was approximately 7,200, which was just a few hundred fish less than the average annual peak count since 1976.

Upper Cook Inlet coho salmon stocks generally benefited from excellent production throughout most of the 1980's and early 1990's. However, coho salmon runs in 1997 and 1999 were viewed as mediocre to poor, prompting BOF action in 1999 and 2000, which resulted in coho salmon conservation restrictions to sport and commercial fishermen in much of UCI. Ironically, the 2000 run appeared to be much improved from recent years, with the 2001 run being even stronger yet (see table on next page). The strength of the 2002 coho salmon run was exceptional, perhaps even a record run. Because coho salmon are strongly dominated by a 4-year cycle, the returns from the 1997 and 1999 brood years occurred primarily in 2001 and 2003. BOF regulatory conservation measures had been enacted as a result of the uncertainty about the sustainability of the 1997 and 1999 escapements, but as can be seen in the table below, the 2001 run (based on escapement) was exceptional, and the 2003 run, which was produced from the 1999 brood year, resulted in escapement levels nearly three times the level of the brood year (the aggregate escapement of coho

Coho Salmon Escapement Enumeration

Year	Cottonwood Creek	Fish Creek	Susitna River	Wasilla Creek	Deep Creek	OTF CPUE
1996		682	15,803			534
1997	936	2,549	9,894	437	2,017	362
1998	2,114	5,552	15,159	3,622	1,541	403
1999	458	1,716	2,833	1,463	2,267	294
2000	2,062	5,989	15,522	6,172	3,408	766
2001	3,514	9,944	30,284	6,507	3,747	838
2002	3,957	14,651	47,938	13,195	6,132	798
2003	791	2,242	11,127	3,712	no count	368

salmon from Cottonwood, Fish, and Wasilla Creeks and Little Susitna River in 1999 was 6,470 and produced an aggregate escapement to these same systems in 2003 of 17,872). Again, it needs to be emphasized that this is just escapement data and does not take into account commercial and sport harvest, but in 2003 there were no restrictions to commercial or sport fisheries outside of management plans. Of significant interest will be the size of the runs produced from the 2000-2003 runs, i.e., will these larger escapements produce larger runs or is there some level of spawners in these systems beyond which no additional production is realized?

Kenai River adult coho salmon runs are enumerated primarily from mark-recapture studies in the Kenai River (Yanusz, et al 2002), as well as monitoring commercial fisheries harvests for coded wire tag recoveries unique to the Kenai River. Smolt enumeration studies are conducted in the

Moose River, a Kenai River tributary that has been shown to be a very important rearing environment for juvenile coho salmon. At the 2002 BOF meeting, conservation measures were implemented to reduce sport and commercial exploitation of early-run Kenai River coho salmon as a result of diminishing escapement levels in the late 1990's. Since that time, coho salmon smolt emigration data from the Moose River and adult population estimates to the Kenai River have revealed that coho salmon production in the Kenai River did not suffer from the smaller escapements. Continued monitoring of smolt and adult production will provide valuable information about Kenai River coho salmon returns from various levels of escapements, which will allow the Department to more precisely set escapement goals that provide for sustained yields.

The commercial fisheries division of ADF&G conducted a marine tagging study in 2001 & 2002 (Willette et al 2003). Two important objectives of this study were to (1) estimate the total number of coho, pink, and chum salmon entering UCI, and (2) apportion out coho salmon escapement to the major watersheds of UCI by locating radio-tagged fish in streams throughout the inlet. Based upon recoveries of Passive Integrated Transponder (PIT) tags, a point estimate for the number of coho salmon that entered UCI in 2002 was approximately 2.5 million. The commercial fishery exploitation rate on all coho salmon stocks was estimated at 10%. Based upon radio telemetry tagging, the 2002 coho salmon escapement in all UCI streams was 1.36 million. The PIT tag population estimate of coho salmon escapement overlapped the radio telemetry population estimate, but was statistically (z-test statistic) different. The PIT tag estimate of coho salmon escapement was 2.27 million. For Kenai River coho salmon, the marine tagging study showed that up through the last day of tagging, which was August 7, this stock had not entered UCI to an appreciable degree. Thus, only the beginning phase of the Kenai River coho salmon run had entered UCI by this date. Because the commercial fishery also ended on August 7 in 2002, exploitation rates on Kenai River coho salmon had to be significantly less than the overall 10% rate applied to all other coho salmon stocks.

After experiencing a significant downturn in the early to mid 1990s, Northern District chinook salmon stocks continue to trend significantly upward and no generalized conservation issues are currently applicable. Late-run Kenai River chinook salmon runs have been relatively stable and escapement objectives have been consistently achieved or exceeded.

COMMERCIAL HERRING FISHERY

In 1998 the Department reopened the Eastern Subdistrict of the Northern District and the Upper Subdistrict of the Central District to commercial herring fishing from April 15 to May 20 by emergency order. In 1999, the Central District Herring Recovery Management Plan became effective, limiting herring fishing in Upper Cook Inlet to the waters of the Upper, Western, and Chinitna Bay Subdistricts. In 2003, the herring fishery in the Upper Subdistrict was open for two 30-hour periods per week from April 20 to May 31. The May 31 closure date represents a modification made to the management plan at the 2001 BOF meeting.

In 2001, samples of herring were collected in Chinitna and Tuxedni Bays. Age, sex, and size distribution of the samples revealed that the years of fishing closure in these areas had resulted in an increase of younger fish being recruited into the population. As a result of these analyses, and in accordance with the Central District Herring Recovery Management Plan, the commercial fishery was reopened in Chinitna Bay and in the Western Subdistrict in 2002. The management plan allows for a very conservative harvest quota, not to exceed 40 and 50 tons, respectively. However, there has been minimal to no participation in either fishery.

The 2003 herring fishery in the Upper Subdistrict resulted in a very low harvest of only 3.7 tons. Eight different permits holders harvested herring in 2003, which was only half of last year's participation. During spot checks of the harvest, Department personnel observed no incidental harvest of chinook salmon, sockeye salmon, or Dolly Varden char (*Salvelinus malma*).

COMMERCIAL RAZOR CLAM FISHERY

Historically the Cook Inlet Razor clam fishery on the west side of Cook Inlet has been confined to the area between Crescent River and Redoubt Point. All clams harvested in this area are directed by regulation to be sold for human consumption, except for the small percentage (less than 10% of the total harvest) of broken clams, which may be sold for bait. Razor clams are present throughout this area, with especially dense concentrations in the Polly Creek and Crescent River areas. Beginning in 1993, the Department of Environmental Conservation certified additional area for human consumption. The additional area is located north of the existing certified beach at Polly Creek north to Redoubt Creek. In 1994 this certification was extended further north to Harriet Point. In the remainder of the Upper Cook Inlet Management Area, there are no restrictions on the amount of clams that can be sold for bait. Currently there is no directed effort to harvest razor clams for the bait market. The minimum legal size for razor clams is four and one-half inches (114mm) in shell length.

The 2003 harvest, taken primarily from the Polly Creek/Crescent River area, was 411,403 pounds (Appendix A.9). A total of 23 diggers participated during the season, reporting harvest from 62 different days, from the time period of May 14 to August 15. Diggers were paid an average of \$.50 per pound for their harvest, resulting in an exvessel value of this fishery of \$206,000. In 2003, approximately 23 thousand pounds of the clams (6%) were processed as bait due to shell breakage, the remainder were sold as food as required. The summer's tide schedule can be found in Table 17.

SUBSISTENCE

There is a long history of Alaskans harvesting fish and game for their personal consumptive needs under sport, subsistence, and commercial fishing regulations in the Cook Inlet area (Braund 1982). Since 1978, when the State of Alaska passed its first subsistence statute (AS 16.05.258), many changes have occurred in the regulations governing the harvest of fish and game for personal consumption in the Cook Inlet Area. Beginning in 1981, a new category of fisheries was established. Personal use fishing was created to provide for the personal consumptive needs of state residents not able to meet their needs under other fisheries. Since their creation, numerous changes have occurred in the personal use or subsistence fisheries in Cook Inlet as a result of challenges in the State of Alaska Court System, The Alaska State Legislature, or the Board of Fisheries process. The only personal use or subsistence fishery that has occurred consistently in Cook Inlet during this entire period is the Tyonek Subsistence fishery. A complete review of the various fisheries and changes that have resulted since 1978 is reported in Brannian and Fox (1996).

Tyonek Subsistence Salmon Fishery

The present subsistence fishery in the Tyonek Subdistrict was created by an Anchorage Superior Court order in May 1980. In March 1981, the Board of Fisheries adopted permanent regulations for this fishery. Originally open only to those individuals living in the village of Tyonek, recent court decisions allow any Alaska resident to participate, although very few non-villagers seek permits. Fishing is allowed only in the Tyonek Subdistrict of the Northern District. A limit of one permit per household can be issued and each permit holder is allowed a single ten-fathom gillnet, having a mesh size no greater than six inches. Fishing is allowed from 4:00 a.m. to 8:00 p.m. each Tuesday, Thursday, and Friday from May 15 to June 15, or until 4,200 chinook salmon are taken. Fishing is again allowed from 6:00 a.m. to 6:00 p.m. each Saturday after June 15, although the opening is delayed until July 1, if 4,200 chinook salmon were taken before June 16. The permit allows 25 salmon per permit holder and 10 salmon for each additional member. However, 5 AAC 01.595(a)(3) allows for up to 70 chinook salmon per permit holder in the Tyonek Subsistence fishery. Annual chinook salmon harvests have ranged from 639 in 1997 to 2,665 in 1983 (Appendix A.15). In 2003, the Tyonek subsistence fishery harvested 973 chinook, 89 sockeye, 29 coho, 5 pink and 10 chum salmon.

Upper Yentna River Subsistence Salmon Fishery

A subsistence fishery is allowed in the Yentna River drainage outside the Anchorage-Matsu-Kenai nonsubsistence area described in 5 AAC99.015(a)(3). The provisions for this fishery allow for the harvest of 25 salmon per head of household plus 10 more for each dependent; however, all chinook salmon and rainbow trout must be returned to the water alive. The specific

area open for this fishery is in the mainstem Yentna River from its confluence with Martin Creek upstream to its confluence with the Skwenta River. Legal gear consists only of fishwheels. The subsistence fishing season occurs from July 15 through July 31 from 4:00 a.m. to 8:00 p.m. each Monday, Wednesday, and Friday during this time frame. The harvest from the 2003 Yentna River subsistence fishery was 553 sockeye, 67 coho, 2 pink, and 8 chum salmon (Appendix A.15). There were 19 Yentna River subsistence permits issued in 2003.

Kenaitze Tribal Educational Fishery

In 1993 a state court ordered ADFG to create an educational fishery for the Kenaitze Indian Tribe, pending final court rulings on other subsistence cases. The objectives for educational fisheries are specified in 5 AAC 93.235 as “educating persons concerning historic, contemporary, or experimental methods for locating, harvesting, handling, or processing fishery resources”. Standards, general conditions, and requirements of the educational fishery program are outlined in 5 AAC 93.200-235. Appendix A.15 summarizes the harvest from the Kenaitze educational fishery since it began in 1994. In 2003, this amounted to 151 chinook, 4,651 sockeye, 439 coho, and 63 pink salmon, for a total of 5,305 salmon, which is nearly a thousand fish more than any other yearly total. These harvests include both early and late-run chinook and sockeye salmon stocks.

Ninilchik Traditional Council / Native Descendents Educational Fishery

In 1993 the Ninilchik Traditional Council (NTC) applied for and was granted a permit for an educational fishery (Szarzi and Begich 2001). In 1998, a group of NTC members formed a new organization, the Ninilchik Native Descendents (NND), and requested a separate permit with similar goals of passing on traditional knowledge and providing food for needy tribal members. Initially one permit was issued for both groups, but this was not acceptable to the NTC and both groups were allowed to fish concurrently. There have been a number of changes to the annual harvest limits allowed under these permits, but in 2003 the NTC harvested 426 sockeye, 87 chinook, 100 coho, and 15 pink salmon (Table 15 and Appendix A.15). The NND caught 94 sockeye, 69 chinook, 77 coho and 13 pink salmon. The largest reported harvest since the inception of the fishery was taken in 2001, primarily by the NTC who harvested 760 sockeye, 75 chinook, 123 coho and 52 pink salmon. For the NND, the largest harvest consisted of 309 sockeye, 74 chinook 110 coho and 17 pink salmon.

PERSONAL USE SALMON FISHERY

Under the Upper Cook Inlet Personal Use Salmon Fishery Management Plan (5 AAC 77.540), personal use fishing is allowed in limited areas in Cook Inlet. The management plan received substantial changes at the BOF meeting in January of 1996. In 1995, the personal use fishery allowed gillnets in most areas of Cook Inlet normally open to commercial set gillnet fishing. However, for the 1996 season, most of this area was closed, but to compensate for this, dip net fisheries were expanded to allow for approximately the same level of harvest that had occurred with gillnets in 1995. Currently, personal use fishing using gillnets is open near the Kasilof River in the waters of UCI normally closed to commercial set gillnet fishing. This area encompasses approximately one mile on either side of the Kasilof River, extending out from shore for one mile. In addition, dip net fishing is allowed at the terminus of the Kenai and Kasilof Rivers. The personal use management plan was again amended at the 2002 BOF meeting, modifying how the dip net fishery at Fish Creek in Knik Arm was to be managed as well as making time changes for the Kenai and Kasilof personal use fisheries. The Fish Creek dip net fishery was continued in regulation, but opens only if the upper end of the escapement goal of 70,000 is projected to be exceeded. The Kasilof gillnet fishery was modified, expanding the days and hours that the fishery is open. The fishery now opens on June 15 and takes place from 6:00 a.m. until 11:00 p.m. daily. Instead of being managed for a harvest goal of 10,000-20,000 fish, the fishery remains open until 11:00 p.m. on June 24, regardless of how many fish are harvested. The amended management plan also changed how the Kenai River dip net fishery is prosecuted. This fishery is open from July 10 through July 31, seven days per week, but only from 6:00 a.m. to 11:00 p.m. daily. However, if the Department determines that the abundance of Kenai River late-run sockeye salmon is greater than two million fish, this fishery may be extended, by emergency order, to 24-hours per day. The Kasilof River dip net personal use fishery occurs from June 25 through August 7, 24-hours per day.

A permit issued by the Department, along with a valid resident sport fishing license, or an exemption from licensing under AS 16.05.400, is required to participate in the personal use fisheries. The annual bag and possession limits are 25 salmon per head of household, with an additional 10 salmon for each household member. However, in the Kasilof River dip net fishery, chinook salmon may not be retained and must be released immediately to the water unharmed. In the Kenai River dip net fishery, one chinook salmon may be retained per household. There are no chinook salmon limitations in the Kasilof River gillnet personal use fishery. Legal gear under the management plan are set gillnets and dip nets. A set gillnet cannot exceed 10 fathoms (60 feet) in length, or 45 meshes in depth. Mesh size must be greater than four inches, but may not exceed six inches. Gillnets must be set at least 100 feet apart at all times. A legal dip net has been defined in regulation (5 AAC 39.105) as a bag-shaped net supported on all sides by a rigid frame. The maximum straight-line distance between any two points on the net frame, as measured through the net opening, may not exceed five feet. The depth of the bag must be at

least one-half of the greatest straight-line distance, as measured through the net opening. No portion of the bag may be constructed of webbing that exceeds a stretched measurement of 4.5 inches; the frame must be attached to a single rigid handle and be operated by hand.

2003 Personal Use Fishery

The personal use fishery using gillnets at the mouth of the Kasilof River opened on June 15 and closed, as stipulated by the amended management plan, on June 24. The total salmon harvest in this fishery was approximately 16,226 fish (Table 15). Of this total, 15,706 were sockeye salmon.

The Kasilof River dip net fishery was in effect from June 25 to August 7. The total harvest from this fishery was approximately 44,835 fish, with the majority (43,870) being sockeye salmon.

The dip net fishery in the Kenai River opened on July 10 and closed, as scheduled, at midnight on July 31. In compliance with the management plan, the fishery was open from 6:00 a.m. to 11:00 p.m. daily until July 19, when an emergency order was announced by Sport Fish division expanding hours to 24-hours per day. Harvest rates in the Kenai River dip net fishery yielded the strongest catch on record, with a total of nearly 228 thousand fish, of which approximately 224 thousand were sockeye salmon (Table 15). The chinook salmon harvest of 1,016 was also the strongest harvest ever reported for this fishery, nearly 400 fish more than the 2001 harvest of 638 chinook salmon.

The Fish Creek personal use dip net fishery was not opened in 2003.

Table 15 summarizes the harvest of salmon from the personal use fisheries in the Central District of UCI. They include: chinook salmon (1,711); sockeye salmon (298,831); coho salmon (2,250); pink salmon (2,082); and chum salmon (371); for a grand total of 305,245. Approximately 19,110 personal use permits were issued in 2003; however, nearly 3,400 permit holders did not return their permits. Nonetheless, harvest numbers are expanded for all personal use permits that are not returned.

Annual sockeye salmon harvests in UCI since 1996, including those from commercial, sport, subsistence, or personal use are presented in Table 18. In 2003, it is very likely that more than four million were harvested, which is the first time since 1997 that this has occurred. The actual sport harvest will not be known until some time in 2004, after the state-wide sport fish harvest summary is complete.

LITERATURE CITED

- Brannian, L. and J. Fox. 1996. Upper Cook Inlet Subsistence and Personal Use Fisheries Report to the Alaska Board of Fisheries, 1996. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2S96-03, Anchorage.
- Braund, S. R. 1982. Cook Inlet Subsistence Salmon Fishery. Alaska Department of Fish and Game, Division of Subsistence Technical Paper 54, Juneau.
- Dodson, T.T. 2003. Big Lake Sockeye Salmon Enhancement Progress Report, 2002. Cook Inlet Aquaculture Association. Soldotna, Alaska.
- Edmundson, J. A., V. P. Litchfield, and D. M. Cialek. 2000. An assessment of trophic status of 25 lakes in the Matanuska-Susitna borough, Alaska. Alaska Department of Fish and Game, Commercial Fisheries Division, Regional Information Report 2A00-26.
- Edmundson, J.M. and J.A. Edmundson. 2002. Sockeye Salmon Production Relative to Changes in Rearing Capacity of Crescent Lake, Upper Cook Inlet. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A02-08, Anchorage.
- King, B. E., and S. C. Walker. 1997. Susitna River sockeye salmon fry studies, 1994 and 1995. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 2A97-26, Anchorage.
- Litchfield, V.P. and T.M. Willette. 2002. Fish Creek Sockeye Salmon Technical Review. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A01-32, Anchorage.
- Nickerson, R.B. 1975. A Critical Analysis of Some Razor Clam Populations in Alaska. Alaska Department of Fish and Game, Fisheries Rehabilitation, Enhancement and Development Division, Juneau.
- Shields, P.A. and T.M. Willette. 2004. An estimate of the Migratory Timing and Abundance of Sockeye Salmon into Upper Cook Inlet, Alaska, in 2003. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A04-15, Anchorage.

LITERATURE CITED, Continued

- Szarzi, N. and R. Begich. 2001. Recreational fisheries in the Lower Cook Inlet Management Area, 1995-2000. A Report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage. 157p.
- Tarbox, K. E. and G. B. Kyle. 1989. An estimate of adult sockeye salmon *Oncorhynchus nerka* production based on euphotic volume for the Susitna River Drainage, Alaska. Alaska Department of Fish and Game, Commercial Fisheries Division. Regional Information Report No. 2S89-01.
- Tobias, T.M. and T.M. Willette. 2004. Abundance, age, sex and size of chinook, sockeye, coho, and chum salmon returning to Upper Cook Inlet, Alaska in 2003. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A04-10, Anchorage.
- Tobias, T.M. and T.M. Willette. 2004. An estimate of Total Return of Sockeye Salmon to Upper Cook Inlet, Alaska, 1976-2003. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A04-11, Anchorage.
- Todd, G. L., S. R. Carlson, P. A. Shields, D. L. Westerman, and L. K. Brannian. 2001. Sockeye and coho salmon escapement studies in the Susitna drainage. Alaska Department of Fish and Game, Division of Commercial Fisheries. Regional Information Report 2A01-11. Anchorage.
- Westerman, D.L. and T.M. Willette. 2003. Upper Cook Inlet Escapement Studies, 2003. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A04-03, Anchorage.
- Willette, T.M., R. DeCino, and N. Grove. 2003. Mark-Recapture Population Estimates of Coho, Pink, and Chum Salmon Runs to Upper Cook Inlet in 2002. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A03-20, Anchorage.
- Yanusz, R., J. Carlon, D. Bosch, and R. Clark. 2002. Stock Status of Coho Salmon in Upper Cook Inlet, Report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.

Table 1. Offshore sockeye salmon test fishing results, F/V Corrina Kay, 2003.

Date	Number of Stations	Fishing Time (min)	Catch	Cum Catch	Index	Cum Index	Mean Length (mm)	Water Temp (c)	Air Temp (c)	Salinity (ppm)	Beginning Wind		Ending Wind	
											Wind		Wind	
											Vel	Dir	Vel	Dir
1-Jul	6	234.4	96	96	74	74	532	9.8	12.2	30.8	20	S	10	SW
2-Jul	6	231.0	67	163	52	126	537	9.9	11.9	30.4	18	SW	28	SE
3-Jul ^a	6	227.0	40	203	32	158	539	10.4	14.6	30.1	14	NE	9	E
4-Jul	6	218.5	14	217	11	169	542	10.9	17.2	29.9	0	-	0	-
5-Jul	6	222.0	72	289	53	222	548	9.9	13.3	31.0	12	SW	8	SW
6-Jul	6	239.5	170	459	113	335	558	11.2	15.2	29.8	8	SE	0	-
7-Jul	6	223.5	91	550	69	404	549	10.5	14.6	30.1	5	SE	0	-
8-Jul	6	210.5	30	580	25	429	558	11.2	15.6	30.2	10	NW	10	SW
9-Jul	6	225.5	81	661	59	488	540	10.9	15.0	29.8	20	SE	17	S
10-Jul	6	230.5	84	745	61	549	559	10.8	13.2	30.0	18	S	25	SE
11-Jul	6	220.5	41	786	31	580	567	11.1	12.0	30.2	19	SW	11	W
12-Jul	6	230.5	78	864	66	646	558	10.9	15.7	30.9	5	SW	5	SW
13-Jul	6	226.0	64	928	42	688	568	10.9	14.5	30.3	5	SE	5	W
14-Jul	6	239.5	124	1,052	89	777	554	10.3	15.1	30.8	15	SE	12	SE
15-Jul	5	213.0	202	1,254	125	902	562	11.1	15.0	30.3	18	SE	42	SE
16-Jul	6	249.5	549	1,803	280	1,181	561	11.4	11.6	30.3	25	SW	20	S
17-Jul	6	214.0	48	1,851	43	1,225	560	11.3	12.3	30.3	12	SW	10	SW
18-Jul	6	237.5	103	1,954	75	1,300	552	11.4	14.7	30.6	12	NW	15	SW
19-Jul	6	231.5	63	2,017	51	1,350	553	11.2	13.8	30.5	0	-	12	SE
20-Jul	6	218.5	11	2,028	9	1,359	557	11.7	15.3	29.8	9	S	5	SE
21-Jul	6	242.0	136	2,164	86	1,446	560	11.9	13.2	29.7	15	S	25	SW
22-Jul	6	217.0	57	2,221	44	1,490	554	12.4	14.6	28.8	10	SW	15	SE
23-Jul	6	242.0	165	2,386	116	1,606	558	12.8	15.7	28.1	18	SE	18	SE
24-Jul	6	225.0	53	2,439	42	1,648	549	13.1	14.3	27.7	10	SE	12	NE
25-Jul	6	218.0	20	2,459	16	1,664	544	12.9	13.2	27.5	15	NW	15	NW
26-Jul	6	229.5	40	2,499	30	1,694	556	12.4	14.8	29.1	5	SE	15	SW
27-Jul ^a	6	228.2	35	2,534	28	1,722	561	12.3	15.2	28.8	15	SW	8	SW
28-Jul	6	227.0	29	2,563	22	1,744	566	12.2	15.5	28.4	25	NW	0	-
29-Jul	6	213.5	46	2,609	38	1,782	557	12.3	13.9	28.5	5	SE	0	-
30-Jul	6	190.0	4	2,613	5	1,787	573	11.7	14.8	29.6	3	S	20	S

^a The test fish boat was unable to fish on these days; the data was interpolated from day before and day after catches.

Table 2. Upper Cook Inlet sockeye salmon enumeration by river and date, 2003.

Date	Kenai River		Kasilof River		Crescent River		Yentna River		Fish Creek	
	daily	cum	daily	cum	daily	cum	daily	cum	daily	cum
15-Jun			1,516	1,516						
16-Jun			964	2,480						
17-Jun			697	3,177						
18-Jun			951	4,128						
19-Jun			2,030	6,158						
20-Jun			5,472	11,630						
21-Jun			7,577	19,207						
22-Jun			4,039	23,246						
23-Jun			9,913	33,159						
24-Jun			7,608	40,767						
25-Jun			5,377	46,144						
26-Jun			8,684	54,828						
27-Jun			959	55,787	4,474	4,474				
28-Jun			457	56,244	4,209	8,683				
29-Jun			3,240	59,484	4,557	13,240				
30-Jun			8,223	67,707	3,819	17,059				
1-Jul	5,611	5,611	3,210	70,917	2,385	19,444				
2-Jul	3,209	8,820	5,990	76,907	1,619	21,063				
3-Jul	4,472	13,292	12,425	89,332	1,271	22,334				
4-Jul	6,389	19,681	5,439	94,771	2,816	25,150				
5-Jul	5,160	24,841	1,753	96,524	2,355	27,505				
6-Jul	3,166	28,007	5,675	102,199	2,564	30,069				
7-Jul	3,975	31,982	10,843	113,042	7,468	37,537	687	687		
8-Jul	4,787	36,769	5,442	118,484	2,057	39,594	539	1,226	0	0
9-Jul	6,434	43,203	7,834	126,318	1,696	41,290	521	1,747	0	0
10-Jul	10,185	53,388	10,075	136,393	1,717	43,007	720	2,467	0	0
11-Jul	24,118	77,506	10,913	147,306	616	43,623	808	3,275	0	0
12-Jul	60,220	137,726	19,381	166,687	2,422	46,045	866	4,141	0	0
13-Jul	40,924	178,650	5,788	172,475	14,224	60,269	5,071	9,212	0	0
14-Jul	29,234	207,884	8,958	181,433	4,102	64,371	13,506	22,718	263	263
15-Jul	21,578	229,462	6,536	187,969	3,472	67,843	12,008	34,726	0	263
16-Jul	89,193	318,655	28,756	216,725	3,989	71,832	8,399	43,125	0	263
17-Jul	108,890	427,545	25,910	242,635	4,621	76,453	4,015	47,140	0	263
18-Jul	93,295	520,840	11,417	254,052	7,727	84,180	9,918	57,058	0	263
19-Jul	71,274	592,114	5,486	259,538	5,097	89,277	10,143	67,201	22	285
20-Jul	31,822	623,936	4,490	264,028	3,064	92,341	21,227	88,428	106	391
21-Jul	31,982	655,918	8,294	272,322	3,735	96,076	21,999	110,427	6,424	6,815
22-Jul	67,116	723,034	10,861	283,183	2,565	98,641	12,155	122,582	5,638	12,453
23-Jul	65,642	788,676	11,582	294,765	2,509	101,150	4,993	127,575	7,089	19,542
24-Jul	54,423	843,099	5,193	299,958	1,906	103,056	7,437	135,012	6,133	25,675
25-Jul	30,520	873,619	6,547	306,505	2,766	105,822	6,492	141,504	6,226	31,901
26-Jul	31,473	905,092	4,067	310,572	2,937	108,759	5,579	147,083	68	31,969
27-Jul	24,470	929,562	6,647	317,219	2,230	110,989	5,440	152,523	9,286	41,255
28-Jul	39,609	969,171	6,769	323,988	1,332	112,321	3,837	156,360	8,043	49,298
29-Jul	28,381	997,552	5,783	329,771	1,862	114,183	2,850	159,210	5,587	54,885
30-Jul	17,890	1,015,442	4,201	333,972	1,751	115,934	2,044	161,254	3,440	58,325
31-Jul	18,273	1,033,715	3,621	337,593	2,678	118,612	3,018	164,272	513	58,838
1-Aug	19,193	1,052,908	3,142	340,735	1,116	119,728	5,836	170,108	9,300	68,138
2-Aug	22,697	1,075,605	3,038	343,773	1,161	120,889	3,984	174,092	7,493	75,631
3-Aug	20,265	1,095,870	2,682	346,455	1,568	122,457	2,475	176,567	5,665	81,296
4-Aug	15,245	1,111,115	1,469	347,924	0	122,457	1,163	177,730	1,264	82,560
5-Aug	10,702	1,121,817	2,024	349,948	0	122,457	1,336	179,066	2,017	84,577
6-Aug	17,827	1,139,644	2,111	352,059	0	122,457	1,747	180,813	1,059	85,636
7-Aug	13,680	1,153,324	2,153	354,212	0	122,457	0	180,813	0	85,636
8-Aug	9,370	1,162,694	1,694	355,906	0	122,457	0	180,813	931	86,567
9-Aug	8,904	1,171,598	1,719	357,625	0	122,457	0	180,813	927	87,494
10-Aug	9,711	1,181,309	2,008	359,633	0	122,457	0	180,813	926	88,420
11-Aug	0	1,181,309	0	359,633	0	122,457	0	180,813	35	88,455
12-Aug	0	1,181,309	0	359,633	0	122,457	0	180,813	1,627	90,082
13-Aug	0	1,181,309	0	359,633	0	122,457	0	180,813	810	90,892
14-Aug	0	1,181,309	0	359,633	0	122,457	0	180,813	193	91,085
15-Aug	0	1,181,309	0	359,633	0	122,457	0	180,813	175	91,260
16-Aug	0	1,181,309	0	359,633	0	122,457	0	180,813	345	91,605
17-Aug	0	1,181,309	0	359,633	0	122,457	0	180,813	138	91,743

Table 3. Commercial chinook salmon catch by area and date, Upper Cook Inlet, 2003.

	Drift		East Side Seinet						West Side Subdistricts				Northern District										
			Salamatof / E.Forelands		N & S K. Beach		Cohoe/Vinitchik		Total		Western		Kustatan		Kalgin		Chinitna Bay		West Side		East Side		
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	
26-May																							
2-Jun	46	46			52	52	244	244	296	296			6	6	5	5				136	136	43	43
4-Jun		46			49	101	328	572	377	673					207	212				252	388	97	140
6-Jun		46			85	186	446	1,018	531	1,204					109	321					388		140
9-Jun		128	174		108	294	268	1,286	376	1,580						75	447			601	989	43	140
11-Jun													6	6	22	469					989	183	183
13-Jun																469					989	183	183
16-Jun																469					989	183	183
18-Jun																469					989	183	183
19-Jun													23	45		469					989	183	183
23-Jun												24	69			469					989	183	183
26-Jun	46	46			52	52	244	244	296	296			31	100	1	469				52	1,041	4	187
27-Jun		46			49	101	328	572	377	673						470					1,041	187	187
28-Jun		46			85	186	446	1,018	531	1,204						470					1,041	187	187
30-Jun	128	174			108	294	268	1,286	376	1,580			34	134	2	472				15	1,056	29	216
1-Jul		174				294	294	1,286		1,580			12	146		472					1,056	216	216
2-Jul		174				294	294	1,286		1,580			2	148		472				8	1,056	216	216
3-Jul	108	282			171	465	289	1,575	460	2,040			4	152		472					1,064	448	448
4-Jul	9	291			149	614	275	1,850	424	2,464			10	162		472					1,064	448	448
5-Jul	11	302			110	724	338	2,188	448	2,912			9	171		472					1,064	448	448
6-Jul	302	302				724		2,188		2,912			15	186		472					1,064	448	448
7-Jul	159	461			261	985	295	2,483	556	3,468			12	198		472				6	1,070	3	451
8-Jul		461				985		2,483	3,468	3,468			3	201		472					1,070	451	451
9-Jul	461	645			114	1,099	385	2,868	499	3,967			1	202		472				4	1,070	451	451
10-Jul	184	645			425	1,524	292	3,160	1,011	4,978			4	206		472					1,074	1	452
11-Jul		645				1,635		3,160	1,111	5,089			1	207		472					1,074	452	452
12-Jul		645			294	1,744	227	3,387	336	5,425			2	209		472					1,074	452	452
13-Jul		645			294	1,846		3,387	102	5,527			2	211		472					1,074	452	452
14-Jul	132	777			539	2,385	570	3,957	1,695	7,222			4	215		472				3	1,077	1	453
15-Jul		777				2,385		3,957		7,222						472					1,077	453	453
16-Jul		777			28	2,413	92	4,049	120	7,342			1	216		472					1,077	453	453
17-Jul	77	854			539	2,952	312	4,361	1,204	8,546			1	217		472					1,077	456	456
18-Jul	64	918			215	3,167	218	4,579	667	9,213						472					1,077	456	456
19-Jul	82	1,000			197	3,364	210	4,789	661	9,874						472					1,077	456	456
20-Jul	32	1,032			367	3,731	282	5,071	1,083	10,957			1	218	14	486					1,077	456	456
21-Jul	58	1,090				4,002	375	5,446	709	11,666			4	222	9	495				3	1,080	1	457
22-Jul		1,090			2218	2,218	4,002	5,446		11,666						495					1,080	457	457
23-Jul	24	1,114			215	4,217	154	5,600	437	12,103			4	226	5	500					1,080	457	457
24-Jul	30	1,144			161	4,378	176	5,846	487	12,590			3	229		504					1,080	458	458
25-Jul	26	1,170			2403	4,551	170	6,016	380	12,970					4	504					1,080	458	458
26-Jul	24	1,194				4,551		6,016		12,970						504					1,080	458	458
27-Jul	3	1,197			34	4,585	79	6,095	117	13,087						504					1,080	458	458
28-Jul	11	1,208			110	4,695	41	6,136	308	13,395			1	230		504					1,207	458	458
29-Jul	2	1,210			131	4,826	63	6,199	320	13,715						504					1,207	458	458
30-Jul	3	1,213			111	4,937	38	6,237	198	13,913						504					1,207	458	458
31-Jul	4	1,217			122	5,059	61	6,298	240	14,153						504					1,207	459	459
1-Aug	1,217	1,217				5,059		6,298		14,153			1	231		504					1,207	459	459
2-Aug	1,217	1,217				5,059		6,298		14,153				231		504					1,207	459	459
3-Aug	12	1,229			129	5,188	72	6,370	334	14,487						504					1,207	459	459
4-Aug	11	1,240			99	5,287	55	6,425	227	14,714						504					1,207	459	459
5-Aug	1,240	1,240			3,002	5,287		6,425		14,714						504					1,207	459	459
7-Aug	1,240	1,240			3,033	5,324	28	6,453	96	14,810						504				2	1,209	459	459
11-Aug	1,240	1,240			3,033	5,324		6,453		14,810						504				1	1,210	459	459
11-Sep	1,240	1,240				5,324		6,453		14,810						504				1	1,211	459	459

Table 5. Commercial coho salmon catch by area and date, Upper Cook Inlet, 2003.

Date	Drift			East Side Setnet				West Side Subdistricts				Northern District			
	Daily	Cum		Salamatoff Forelands	N & S K. Beach	Coho/Niulikuk	Total	Western	Kuskatan	Kalgin	Chistina Bay	West Side	East Side		
				Daily	Cum	Daily	Daily	Cum	Daily	Cum	Daily	Daily	Daily	Cum	Cum
26-Jun	72	72				1	1	1		1					
30-Jun	140	212						2		4					
2-Jul	212					1	1	2		5					
3-Jul	374	586				8	10	6		19			5		5
4-Jul	32					3	12	12		24					5
5-Jul	618					5	17	16		24					5
6-Jul	618					9	26	28		24					5
7-Jul	2,029	2,647				13	39	47		113		30	22		27
8-Jul		2,647				13	52	52		137		30			27
9-Jul		2,647				13	65	58		137		30			27
10-Jul	322	2,969		44		14	87	77	2	270		103	51		78
11-Jul		2,969		44		45	131	96		407		38			78
12-Jul		2,969		44		20	165	122		407		171			78
13-Jul		2,969		44		56	165	156		407		171			78
14-Jul	5,724	8,693		72		38	159	194		784		413	41		119
15-Jul		8,693				103	324	205		784		584			119
16-Jul		8,693				753	1,080	287		784		584			119
17-Jul	9,932	18,625		294		774	1,186	477		1,324		536	238		357
18-Jul	393	19,018		143		36	238	577		1,324		1,120			357
19-Jul	298	19,316		105		15	264	682		1,324		1,120			357
20-Jul	669	19,985		203		40	271	817		1,324		1,120			357
21-Jul	6,821	26,806		258		75	361	963		1,904		1,938	368		725
22-Jul		26,806				1,796	3,281	1,116		1,904					725
23-Jul	1,145			122		105	260	1,380		1,904					725
24-Jul	8,035	35,866		204		451	710	1,623		2,433		4,066	525		1,250
25-Jul	4,648	40,634		377		267	687	1,806		2,433					1,250
26-Jul	110	40,744				497	1,291	1,926		2,433					1,250
27-Jul	16	40,760		1,101		137	2,756	37		2,433		1,603	606		1,856
28-Jul	3,288	44,048		270		110	464	358		2,574					1,856
29-Jul		44,118		91		78	294	10		2,574					1,856
30-Jul	41	44,159		199		77	323	186		2,574		1,214	354		2,210
31-Jul	3,412	47,571		239		86	441	301		4,160					2,210
1-Aug	3	47,574				3,107	7,661	332		4,160		9,941			2,210
2-Aug		47,574				3,107	7,661	3150		4,160		9,941			2,210
3-Aug	4	47,578		397		196	8,359	3,150		6,044					2,210
4-Aug	3,522	51,100		296		434	861	641	414	984		1,187	304		2,514
7-Aug	1,332	52,432		457		391	951	527		1,132		1,751	683		3,197
11-Aug	52,432			4,872		4,128	10,171	333		705		198	979		4,176
14-Aug	52,432			4,872		4,128	10,171	129		8,959		473	383		4,559
18-Aug	52,432			4,872		4,128	10,171	397		9,187		539	1,799		6,358
21-Aug	52,432			4,872		4,128	10,171	285		9,260		282	1,118		7,476
25-Aug	52,432			4,872		4,128	10,171			9,260		92	781		8,257
28-Aug	52,432			4,872		4,128	10,171			9,260		82	8320		14,545
1-Sep	52,432			4,872		4,128	10,171			9,260		69	432		8,752
4-Sep	52,432			4,872		4,128	10,171			9,260		29	428		9,180
8-Sep	52,432			4,872		4,128	10,171			9,260					9,340
11-Sep	52,432			4,872		4,128	10,171			9,260					9,372

Table 6. Commercial pink salmon catch by area and date, Upper Cook Inlet, 2003.

Date	Drift		East Side Setnet				Total		West Side Subdistricts				Northern District			
	Daily	Cum	Salamatof/E Forelands	N & S K. Beach	Cohoe/Nailchik	Cum	Daily	Cum	Western	Kustatan	Kalgin	Chitina Bay	West Side	East Side		
			Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum		
23-Jun	170	170		3	57	57	60	60	2	2	19	19		2		
26-Jun	170	170		6	54	111	60	120	8	10	1	1		2		
27-Jun				15	24	100	115	235		10				2		
28-Jun	170	170		15	24	100	211	408		10				2		
30-Jun	536	706		18	42	197	408	215	13	23	16	35		11		
1-Jul		706		42		408	450	450		23		35		13		
2-Jul		706		42		408	450	450		23		35		13		
3-Jul	1,151	1,857		12	54	259	667	721		23	21	56	2	36		
4-Jul	76	1,933		36	90	557	1,224	593	2	25		56	2	36		
5-Jul	10	1,943		15	105	441	1,665	456	1	26		56	2	36		
6-Jul		1,943			105	1,665	1,770	1,770	2	28		56	2	36		
7-Jul	2,778	4,721		62	167	534	2,199	596	28	56	136	192	9	175		
8-Jul		4,721		167		2,199	2,366	2,366	56	56		192	11	175		
9-Jul		4,721		21	188	552	2,751	573		56		192	11	175		
10-Jul	1,485	6,206	157	34	222	265	3,016	456	26	82	2	194	14	307		
11-Jul	6,206	6,206	157		222	3,016				82		194	25	307		
12-Jul	6,206	6,206	157	100	322	1,280	4,296	1,380		82		194	25	307		
13-Jul		6,206	157		322		4,296	4,775		82		194	25	307		
14-Jul	3,394	9,600	248	160	482	936	5,232	1,344	32	114		194	143	382		
15-Jul		9,600	405		482		5,232	6,119		114		194	168	382		
16-Jul		9,600	405	5	487	90	5,322	95		114		194		382		
17-Jul	5,692	15,292	254	161	648	684	6,006	1,099	4	118		194	27	474		
18-Jul	954	16,246	172	831	51	699	1,007	7,013		118		194	195	474		
19-Jul	930	17,176	126	957	38	737	358	7,371		118		194	195	474		
20-Jul	694	17,870	210	1,167	51	788	908	8,279		118		194	195	474		
21-Jul	3,860	21,730	198	1,365	69	857	712	8,991	25	143		194	200	639		
22-Jul		21,730			857		8,991	979		143		194	395	639		
23-Jul	785	22,515	156	1,521	53	910	944	9,935		143		194	395	639		
24-Jul	2,467	24,982	132	1,653	25	935	1,060	10,995	17	160		194	492	715		
25-Jul	2,572	27,554	126	1,779	41	976	975	11,970		160		194	492	715		
26-Jul	175	27,729		1,779		976		14,725		160		194	492	715		
27-Jul	9	27,738	16	1,795	31	1,007	129	12,099		160		194	492	715		
28-Jul	1,849	29,587	154	1,949	43	1,050	107	12,206	1	161		194	45	828		
29-Jul	61	29,648	69	2,018	34	1,084	196	12,402		161		194	537	828		
30-Jul	41	29,689	122	2,140	32	1,116	168	12,570		161		194	537	828		
31-Jul	386	30,075	113	2,253	48	1,164	80	12,650	3	164		194	59	878		
1-Aug	1	30,076			1,164		12,650	241		164		194	596	878		
2-Aug	4	30,080			1,164		12,650	16,067		164		194	596	878		
3-Aug	1	30,081	59	2,312	89	1,190	12,739	174		164		194	596	878		
4-Aug	277	30,358	35	2,347	24	1,214	83	12,822	5	169		194	35	882		
5-Aug		30,358	2,347		1,214		12,822	16,383		169		194	631	882		
7-Aug	18	30,376	26	2,373	8	1,222	57	12,879	6	175		194	15	904		
11-Aug		30,376	2,373	1,222		1,222	12,879	16,474	3	178		194	1	911		
14-Aug		30,376	2,373		1,222		12,879	16,474		178		194	1	911		
18-Aug		30,376	2,373		1,222		12,879	16,474		178		194	2	913		
21-Aug		30,376	2,373		1,222		12,879	16,474	1	179		194	2	914		

Table 7. Commercial chum salmon catch by area and date, Upper Cook Inlet, 2003.

Date	Drift		East Side Setnet				West Side Subdistricts				Northern District				
	Daily	Cum	Salamatoffe Forwards	N & S K. Beach	Coboc/Nnitchik	Total	Western	Kustatan	Kalgin	Chimrina Bay	General	Daily	Cum	Daily	Cum
26-Jun	245	245			1	1									
27-Jun	245	245			1	1									
28-Jun	245	245			1	1									
30-Jun	1,422	1,667			1	2	3								
1-Jul	1,667	1,667			2	2	3								
2-Jul	1,667	1,667			2	2	3								
3-Jul	3,842	5,509			2	2	1	4	4		4				
4-Jul	117	5,626			2	4	4	8	4		4				
5-Jul	5,626	5,626			3	7	9	17	4		4				
6-Jul	5,626	5,626			7	7	26	43	4		4				
7-Jul	9,977	15,603			7	7	40	83	149		20	24	9		
8-Jul	15,603	15,603			7	7	23	106	153		24	24	9		
9-Jul	15,603	15,603		1	1	8	27	133	153		24	24	9		
10-Jul	759	16,362	21	1	2	24	55	188	219		164	188	28		
11-Jul		16,362	21		10	33	22	210			2	190	37		
12-Jul		16,362		1	3	3	85	295				190	37		
13-Jul		16,362	21		2	12	63	358				190	37		
14-Jul	13,929	30,291	11	7	3	26	72	430	175		205	395	2		
15-Jul		30,291	32	10	8	62	10	440				395	39		
16-Jul		30,291	32	10	20	62	38	478				395	39		
17-Jul	16,534	46,825	27	6	5	38	117	595	98		172	567	9		
18-Jul	1,357	48,182	8	4	20	16	129	724				567	48		
19-Jul	443	48,625	6	73	4	60	176	922				567	48		
20-Jul	1,241	49,866	45	118	7	52	196	1,118				567	48		
21-Jul	12,033	61,899	20	138	7	52	688	1,806	314		1,078	1,645	132		
22-Jul		61,899	138	73	69	280	236	2,042				1,645	180		
23-Jul	2,655	64,554	36	174	137	111	286	2,328				1,645	180		
24-Jul	15,538	80,092	141	315	699	727	402	2,730	68		567	1,645	344		
25-Jul	11,209	91,301	149	464	893	351	201	2,931				1,027	524		
26-Jul	234	91,535	464		893	1,469	179	3,110				1,027	524		
27-Jul	9	91,544			914	23	1,492	71	14			1,027	524		
28-Jul	9,873	101,417	47	512	21	23	3,181	3,181				1,041	524		
29-Jul	38	101,455	12	524	26	76	3,468	287				1,041	524		
30-Jul	112	101,567	76	600	28	42	3,482	14				1,041	524		
31-Jul	2,085	103,652	70	670	33	114	75	3,557				1,041	524		
1-Aug	8	103,660	70	670	17	89	101	3,658	173		357	3,029	39		
2-Aug		103,660	670	125	1018	1,813	138	3,796				3,029	601		
3-Aug	10	103,670	670	125	1018	1,813	3796	3,796				3,029	601		
4-Aug	2,372	106,042	16	708	13	35	649	4,445	361		452	3,029	601		
5-Aug	1	106,043	708	128	12	31		4,445	316			3,029	601		
7-Aug	425	106,468	19	2	33	54	757		4			3,029	601		
11-Aug		106,468	727	130	1076	1,933	5,202					3,481	625		
14-Aug		106,468	727	130	1076	1,933	111		153		142	3,623	10		
18-Aug		106,468	727	130	1076	1,933	111		135		32	3,655	18		
21-Aug		106,468	727	130	1076	1,933	153		4		53	3,708	37		
25-Aug		106,468	727	130	1076	1,933	116		25		41	3,749	20		
28-Aug		106,468	727	130	1076	1,933	80		9		2	3,751	8		
1-Sep		106,468	727	130	1076	1,933	5,662				4	3,755	1		
4-Sep		106,468	727	130	1076	1,933	5,662				4	3,759	1		

Table 8. Commercial salmon catch by gear, statistical area and species, Upper Cook Inlet, 2003.

Gear	District	Subdistrict	Stat Area	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Drift	Central	All	All	420	1,240	1,593,638	52,432	30,376	106,468	1,784,154
Set Net	Central	Upper	24421	103	2,852	433,375	1,511	8,470	664	446,872
			24422	105	3,601	338,953	2,617	4,409	412	349,992
			24431	80	3,813	255,104	467	782	46	260,212
			24432	55	1,511	165,113	704	440	84	167,852
			24441	53	2,941	481,981	2,177	1,069	272	488,440
			24442	35	92	72,315	2,695	1,304	455	76,861
			All	342	14,810	1,746,841	10,171	16,474	1,933	1,790,229
	Kalgin Is.		24610	17	35	26,135	7,053	172	1,912	35,307
			24620	6	0	14,802	2,207	22	305	17,336
			All	21	35	40,937	9,260	194	2,217	52,643
	Chinitna		24510							
	Western		24520	2	6	1,161	1	4		1,172
			24530	19	210	34,595	3,481	120	5,457	43,863
			24540							0
			24550	4	15	5,045	1,980	55	205	7,300
			All	25	231	40,801	5,462	179	5,662	52,335
	Kustatan		24555	8	501	5,346	414		4	6,265
			24560	1	3	109	2	2	0	116
			All	8	504	5,455	416	2	4	6,381
	All	All	All	372	15,580	1,834,034	25,309	16,849	9,816	1,901,588
	Northern	General	24710	3	70	252	49	17	4	392
			24720	8	516	1,298	402	28	30	2,274
			24730	18	109	6,237	4,220	329	988	11,883
			24741	12	305	8,884	4,917	193	1,821	16,120
			24742	6	147	7,011	3,309	83	712	11,262
			24743	3	64	1,661	1,746	0	204	3,675
			24750	0	0	0	0	0	0	0
			All	36	1,211	25,343	14,643	650	3,759	45,606
	Eastern		24770	14	393	7,149	3,570	575	477	12,164
			24780	14	28	4,190	2,611	121	192	7,142
			24790	10	38	11,805	3,191	218	55	15,307
			All	23	459	23,144	9,372	914	724	34,613
	All	All	All	59	1,670	48,487	24,015	1,564	4,483	80,219
All	All	All	All	448	17,250	1,882,521	49,324	18,413	14,299	1,981,807
Seine	All	All	All	0	0	0	0	0	0	0
All	All	All	All	868	18,490	3,476,159	101,756	48,789	120,767	3,765,961

Table 9. Commercial salmon catch per permit by statistical area, Upper Cook Inlet, 2003.

Gear	District	Subdistrict	Stat Area	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Drift	Central	All	All	420	3.0	3,794	125	72	253	4,248
Set Net	Central	Upper	24421	103	28	4,208	15	82	6	4,339
			24422	105	34	3,228	25	42	4	3,333
			24431	80	48	3,189	6	10	1	3,253
			24432	55	27	3,002	13	8	2	3,052
			24441	53	55	9,094	41	20	5	9,216
			24442	35	3	2,066	77	37	13	2,196
			All	342	43	5,108	30	48	6	5,235
		Kalgin Is.	24610	17	2	1,537	415	10	112	2,077
			24620	6	0	2,467	368	4	51	2,889
			All	21	2	1,949	441	9	106	2,507
		Chinitna	24510							
	Western		24520	2	0	0	0	0	0	0
			24530	19	11	1,821	183	6	287	2,309
			24540		0	0	0	0	0	0
			24550	4	4	1,261	495	14	51	1,825
			All	25	9	1,632	218	7	226	2,093
	Kustatan		24555	8	63	668	52	0	1	783
			24560	1	3	109	2	2	0	116
			All	8	63	682	52	0	1	798
	All	All	All	372	42	4,930	68	45	26	5,112
	Northern	General	24710	3	23	84	16	6	1	131
			24720	8	65	162	50	4	4	284
			24730	18	6	347	234	18	55	660
			24741	12	25	740	410	16	152	1,343
			24742	6	25	1,169	552	14	119	1,877
			24743	3	21	554	582	0	68	1,225
			24750	0	0	0	0	0	0	0
			All	36	34	704	407	18	104	1,267
	Eastern		24770	14	28	511	255	41	34	869
			24780	14	2	299	187	9	14	510
			24790	10	4	1,181	319	22	6	1,531
			All	23	20	1,006	407	40	31	1,505
	All	All	All	59	28	822	407	27	76	1,360
	All	All	All	448	39	4,202	110	41	32	4,424
Seine	All	All	All	0	0	0	0	0	0	0
All	All	All	All	868	21	4,005	117	56	139	4,339

Table 10. Commercial fishery emergency orders issued during the 2003 Upper Cook Inlet fishing season (page 1 of 6).

Emergency Order No.	Effective Date	Action	Reason
1	26-Jun	Extended set gillnetting in the Kasilof Section on Thursday, June 26 from 7:00 pm until 7:00 pm on June 27. Drift gillnetting was opened in the Kasilof Section on Thu, June 26 from 7:00 pm to 12:00 midnight, and Fri, Jun 27 from 5:00 am to 7:00 pm.	To reduce the escapement rate of Kasilof River sockeye salmon.
2	27-Jun	Extended set gillnetting in the Kasilof Section of the Upper Subdistrict on Friday June 27, 2003 from 7:00 p.m. until 7:00 p.m. on Saturday June 28, 2003. Drift gillnetting was opened in the Kasilof Section on Friday June 27, 2003 from 7:00 p.m. to 12:00	To reduce the escapement rate of Kasilof River sockeye salmon.
3	30-Jun	Extended set gillnetting in that portion of the Western Subdistrict of the Central District south of the latitude of Redoubt Point from 7:00 p.m. on Monday, June 30 until further notice.	To increase the exploitation rate on Crescent River sockeye salmon.
4	30-Jun	Extended set gillnetting in the Kasilof Section of the Upper Subdistrict on Monday, June 30 from 7:00 p.m. until 9:00 p.m. Drift gillnetting was opened in the Kasilof Section of the Upper Subdistrict on Monday, June 30 from 7:00 p.m. until 9:00 p.m..	To reduce the escapement rate of Kasilof River sockeye salmon.
5	3-Jul	Extended set gillnetting in the Kasilof Section of the Upper Subdistrict on Thursday, July 3 from 7:00 p.m. until 11:00 p.m on Friday, July 4. Drift gillnetting was opened in the Kasilof Section on Thursday, July 3 from 7:00 p.m. until 11:00 p.m. and on	To reduce the escapement rate of Kasilof River sockeye salmon.
6	4-Jul	Extended set gillnetting in the Kasilof Section of the Upper Subdistrict on Friday, July 4 from 11:00 p.m.until 5:00 p.m on Saturday, July 6. Drift gillnetting was opened in the Kasilof Section on Saturday, July 5 from 5:00 a.m. until 5:00 p.m.	To reduce the escapement rate of Kasilof River sockeye salmon.
7	9-Jul	Opened set gillnetting in that portion of the Kasilof Section of the Upper Subdistrict within 1/2 mile of the mean high tide mark on the Kenai Peninsula shoreline on Wednesday, July 9 from 7:00 a.m until 3:00 p.m.	To reduce the escapement rate of Kasilof River sockeye salmon.

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Table 10. Commercial fishery emergency orders issued during the 2003 Upper Cook Inlet fishing season (page 2 of 6).

Emergency Order No.	Effective Date	Action	Reason
8	10-Jul	Closed commercial salmon fishing with drift gillnets in all areas of the Central District of Upper Cook Inlet, except in the Kenai and Kasilof Sections of the Upper Subdistrict, on Thursday, July 10 from 7:00 a.m. to 7:00 p.m.	To reduce the exploitation rate on Susitna River sockeye salmon.
9	12-Jul	Opened set gillnetting in that portion of the Kasilof Section of the Upper Subdistrict within ½ mile of the mean high tide mark on the Kenai Peninsula shoreline on Saturday, July 12 from 7:00 a.m. until 11:00 p.m..	To reduce the escapement rate of Kasilof River sockeye salmon.
10	14-Jul	Closed drift gillnetting in all areas of the Central District, except in the Kenai and Kasilof sections and that portion of the Central District south of 60° 27.10 minutes N. Latitude, which is the latitude of the Blanchard line, on Monday, July 14 from 7:00 a.m. to 7:00 p.m.	To reduce the exploitation rate on Susitna River sockeye salmon.
11	14-Jul	Extended set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict on Monday, July 14 from 7:00 p.m. until 9:00 p.m. Drift gillnetting was opened in the Kenai and Kasilof Sections on Monday, July 14 from 7:00 p.m. to 9:00	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
12	16-Jul	Opened set gillnetting in that portion of the Kasilof Section of the Upper Subdistrict within ½ mile of the mean high tide mark on the Kenai Peninsula shoreline on Wednesday, July 16 from 8:00 a.m. until 8:00 p.m..	To reduce the escapement rate of Kasilof River sockeye salmon.
13	16-Jul	Extended set gillnetting in that portion of the Kasilof Section of the Upper Subdistrict within ½ mile of the mean high tide mark on the Kenai Peninsula shoreline on Wednesday, July 16 from 8:00 p.m. until 7:00 a.m. on Thursday, July 17.	To reduce the escapement rate of Kasilof River sockeye salmon.
14	17-Jul	Extended set gillnetting in the Kenai, Kasilof and East Forelands sections of the Upper Subdistrict on Thursday, July 17 from 7:00 p.m. until 10:00 p.m. Drift gillnetting was opened in the Kenai and Kasilof Sections on Thursday, July 17 from 7:00 p.m. until 10:00 p.m.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.

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Table 10. Commercial fishery emergency orders issued during the 2003 Upper Cook Inlet fishing season (page 3 of 6).

Emergency Order No.	Effective Date	Action	Reason
15	18-Jul	Emergency Order Number 2S-15-03 opens set gillnetting in the Kenai, Kasilof and East Forelands sections of the Upper Subdistrict on Friday July 18 from 2:00 p.m. until 12:00 midnight. Drift gillnetting was opened in the Kenai and Kasilof Sections of the Upper Subdistrict on Friday July 18 from 2:00 p.m. until 12:00 midnight.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
16	19-Jul	Emergency Order Number 2S-16-03 opens set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict on Saturday, July 19, from 3:00 p.m. until 12:00 midnight. Drift gillnetting was opened in the Kenai and Kasilof Sections of the Upper Subdistrict on Saturday, July 19, from 3:00 p.m. until 12:00 midnight.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
17	20-Jul	Extended set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict from midnight on Saturday, July 19 until 5:00 p.m. on Sunday, July 20. Drift gillnetting was opened in the Kenai and Kasilof sections of the Upper Subdistrict on Sunday July 20 from 5:00 a.m. until 5:00 p.m..	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
18	21-Jul	Extended set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict from 7:00 p.m. on Monday, July 21 until 12:00 midnight. Drift gillnetting was opened in the Kenai and Kasilof sections of the Upper Subdistrict from 7:00 p.m. until 11:00 p.m. on Monday, July 21.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
19	23-Jul	Opened set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict on Wednesday, July 23, from 7:00 a.m. until 9:00 p.m. Drift gillnetting was opened in the Kenai and Kasilof Sections of the Upper Subdistrict on Wednesday, July 23, from 7:00 a.m. until 12:00 midnight.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
20	23-Jul	Extended set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict from 9:00 p.m. on Wednesday, July 23 until 7:00 a.m. on Thursday, July 24. Set gillnetting was opened in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict from 7:00 a.m. until 7:00 p.m. on Friday, July 25. Drift gillnetting was opened in the entire Central District on Friday, July 25 from 7:00 a.m. until 7:00 p.m.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.

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Table 10. Commercial fishery emergency orders issued during the 2003 Upper Cook Inlet fishing season (page 4 of 6).

Emergency Order No.	Effective Date	Action	Reason
21	24-Jul	Closed drift gillnetting in all areas of the Central District, except in the following four areas: (1) that portion of the Central District south of 60° 20.43' N. lat., (2) in the Kenai and (3) Kasilof sections of the Upper Subdistrict, and (4) that portion of the Central District enclosed by the following five points: 60° 20.43' N. lat., 151° 54.83' W. long., 60° 34.00' N. lat., 151° 41.75' W. long., 60° 34.00' N. lat., 151° 25.93' W. long., 60° 27.10' N. lat., 151° 25.50' W. long., 60° 20.43' N. lat., 151° 28.55' W. long.	To reduce the exploitation rate of Northern District coho salmon while also allowing fishing in an area that would reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
22	26-Jul	Opened drift gillnetting in the seaward portion of the Kenai and Kasilof Sections of the Upper Subdistrict on Saturday, July 26 from 5:00 a.m. until 11:00 p.m. Those waters located within one mile of the mean high tide mark north of the Kenai River and within one and one half miles of the mean high tide mark south of the Kenai River remain closed to drift gillnets and set gillnets during this period.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
23	27-Jul	Opened set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict on Sunday, July 27 from 7:00 a.m. until 7:00 p.m. Drift gillnetting was opened in the Kenai and Kasilof sections of the Upper Subdistrict on Sunday, July 27 from 7:00 a.m. until 7:00 p.m.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
24	28-Jul	Closed drift gillnetting in all areas of the Central District on Monday, July 28 from 7:00 a.m. until 7:00 p.m, except in the following four areas, which are open: (1) that portion of the Central District south of 60° 20.43' N. lat., (2) in the Kenai and (3) Kasilof sections of the Upper Subdistrict, and (4) that portion of the Central District enclosed by the following five points: 60° 20.43' N. lat., 151° 54.83' W. long., 60° 34.00' N. lat., 151° 41.75' W. long., 60° 34.00' N. lat., 151° 25.93' W. long., 60° 27.10' N. lat., 151° 25.50' W. long., 60° 20.43' N. lat., 151° 28.55' W. long.	To reduce the exploitation rate of Northern District coho salmon while also allowing fishing in an area that would reduce the escapement rate of Kenai and Kasilof River sockeye salmon.

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Table 10. Commercial fishery emergency orders issued during the 2003 Upper Cook Inlet fishing season (page 5 of 6).

Emergency Order No.	Effective Date	Action	Reason
21	24-Jul	Closed drift gillnetting in all areas of the Central District, except in the following four areas: (1) that portion of the Central District south of 60° 20.43' N. lat., (2) in the Kenai and (3) Kasilof sections of the Upper Subdistrict, and (4) that portion of the Central District enclosed by the following five points: 60° 20.43' N. lat., 151° 54.83' W. long., 60° 34.00' N. lat., 151° 41.75' W. long., 60° 34.00' N. lat., 151° 25.93' W. long., 60° 27.10' N. lat., 151° 25.50' W. long., 60° 20.43' N. lat., 151° 28.55' W. long.	To reduce the exploitation rate of Northern District coho salmon while also allowing fishing in an area that would reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
22	26-Jul	Opened drift gillnetting in the seaward portion of the Kenai and Kasilof Sections of the Upper Subdistrict on Saturday, July 26 from 5:00 a.m. until 11:00 p.m. Those waters located within one mile of the mean high tide mark north of the Kenai River and within one and one half miles of the mean high tide mark south of the Kenai River remain closed to drift gillnets and set gillnets during this period.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
23	27-Jul	Opened set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict on Sunday, July 27 from 7:00 a.m. until 7:00 p.m. Drift gillnetting was opened in the Kenai and Kasilof sections of the Upper Subdistrict on Sunday, July 27 from 7:00 a.m. until 7:00 p.m.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
24	28-Jul	Closed drift gillnetting in all areas of the Central District on Monday, July 28 from 7:00 a.m. until 7:00 p.m, except in the following four areas, which are open: (1) that portion of the Central District south of 60° 20.43' N. lat., (2) in the Kenai and (3) Kasilof sections of the Upper Subdistrict, and (4) that portion of the Central District enclosed by the following five points: 60° 20.43' N. lat., 151° 54.83' W. long., 60° 34.00' N. lat., 151° 41.75' W. long., 60° 34.00' N. lat., 151° 25.93' W. long., 60° 27.10' N. lat., 151° 25.50' W. long., 60° 20.43' N. lat., 151° 28.55' W. long.	To reduce the exploitation rate of Northern District coho salmon while also allowing fishing in an area that would reduce the escapement rate of Kenai and Kasilof River sockeye salmon.

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Table 10. Commercial fishery emergency orders during the 2003 Upper Cook Inlet fishing season (page 6 of 6).

Emergency Order No.	Effective Date	Action	Reason
29	2-Aug	Opened drift gillnetting in the seaward portion of the Kenai and Kasilof Sections of the Upper Subdistrict on Saturday, August 2, from 5:00 a.m. to 11:00 p.m., except that those waters within one mile of the mean high tide mark north of the Kenai River and within one and one half miles of the mean high tide mark south of the Kenai River were closed to drift gillnets.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
30	3-Aug	Opened set gillnetting in the Kalgin Island Subdistrict of the Central District on Sunday, August 3 from 6:00 a.m. to 6:00 p.m..	To reduce the escapement rate of Packers Lake sockeye salmon.
31	3-Aug	'Opened set gillnetting in the Kenai, Kasilof and East Forelands Sections of the Upper Subdistrict from 7:00 a.m. on Sunday, August 3 until 7:00 a.m. on Monday August 4. Drift gillnetting was opened in the Kenai and Kasilof Sections of the Upper Subdistrict on Sunday, August 3 from 5:00 a.m. until 11:00 p.m., except from 5:00 a.m. to 7:00 a.m. and from 7:00 p.m. to 11:00 p.m. those waters within one mile of the mean high tide mark north of the Kenai River and within one and one half miles of the mean high tide mark south of the Kenai River were closed to drift gillnets. Drift gillnetting was opened in the Kenai and Kasilof sections of the Upper Subdistrict on Monday, August 4 from 5:00 a.m. to 7:00 a.m..	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
32	4-Aug	Opened drift gillnetting in the seaward portion of the Kenai and Kasilof Sections of the Upper Subdistrict on Monday, August 4 from 7:00 p.m.until 11:00 p.m., and Tuesday, August 5, from 6:00 a.m. to 11:00 p.m., except that those waters within one mile of the mean high tide mark north of the Kenai River and within one and one half miles of the mean high tide mark south of the Kenai River were closed to drift gillnets during this time period.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.
33	6-Aug	Opened drift gillnetting in the seaward portion of the Kenai and Kasilof Sections of the Upper Subdistrict on Wednesday, August 6, from 6:00 a.m. until 11:00 p.m., and on Thursday, August 7, from 6:00 a.m. to 7:00 a.m., except that those waters within one mile of the mean high tide mark north of the Kenai River and within one and one half miles of the mean high tide mark south of the Kenai River were closed to drift gillnets during this time period.	To reduce the escapement rate of Kenai and Kasilof River sockeye salmon.

Table 11. Commercial salmon fishing periods, Upper Cook Inlet, 2003 (page 1 of 3).

Date	Day	Time	Set Gill Net	Drift Gill Net
26-May	Mon	0700-1300	Northern District	
2-Jun	Mon	0700-1300	Northern District	
		0700-1900	Kustatan/Big River	
4-Jun	Wed	0700-1900	Kustatan/Big River	
6-Jun	Fri	0700-1900	Kustatan/Big River	
9-Jun	Mon	0700-1300	Northern District	
		0700-1900	Kustatan/Big River	
11-Jun	Wed	0700-1900	Kustatan/Big River	
13-Jun	Fri	0700-1900	Kustatan/Big River	
16-Jun	Mon	0700-1300	Kustatan/Big River & Western Subdistrict	
18-Jun	Wed	0700-1900	Kustatan/Big River	
19-Jun	Thu	0700-1900	Western Subdistrict	
20-Jun	Fri	0700-1900	Kustatan/Big River	
23-Jun	Mon	0700-1900	Kustatan/Big River & Western Subdistrict	
26-Jun	Thu	0700-1900	All except Kenai & E. Forelands Sections	All
		1900-2400	Kasilof Section	Kasilof Section
27-Jun	Fri	0000-2400	Kasilof Section	
		0500-2400		Kasilof Section
28-Jun	Sat	0000-1900	Kasilof Section	
		0500-1900		Kasilof Section
30-Jun	Mon	0700-1900	All except Kenai & E. Forelands Sections	All
		1900-2100	Kasilof Section	Kasilof Section
		1900-2400	Western Subdistrict S. of Redoubt Pt.	
1-Jul	Tue	0000-2400	Western Subdistrict S. of Redoubt Pt.	
2-Jul	Wed	0000-2400	Western Subdistrict S. of Redoubt Pt.	
3-Jul	Thu	0000-0700	Western Subdistrict S. of Redoubt Pt.	
		0700-1900	All except Kenai & E. Forelands Sections	All
		1900-2300		Kasilof Section
		1900-2400	Kasilof Section & Western Subdistrict S. of Redoubt Pt.	
4-Jul	Fri	0000-2400	Kasilof Section & Western Subdistrict S. of Redoubt Pt.	
		0500-2300		Kasilof Section
5-Jul	Sat	0000-1700	Kasilof Section & Western Subdistrict S. of Redoubt Pt.	
		0500-1700		Kasilof Section
		1700-2400	Western Subdistrict S. of Redoubt Pt.	
6-Jul	Sun	0000-2400	Western Subdistrict S. of Redoubt Pt.	
7-Jul	Mon	0000-0700	Western Subdistrict S. of Redoubt Pt.	
		0700-1900	All except Kenai & E. Forelands Sections	All
		1900-2400	Western Subdistrict S. of Redoubt Pt.	

continued

Table 11. Commercial salmon fishing periods, Upper Cook Inlet, 2003 (page 2 of 3).

Date	Day	Time	Set Gill Net	Drift Gill Net
8-Jul	Tue	0000-2400	Western Subdistrict S. of Redoubt Pt.	Kenai & Kasilof Sections
9-Jul	Wed	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0700-1500	Kasilof Section within 1/2 mile of shore	
10-Jul	Thu	0000-0700	Western Subdistrict S. of Redoubt Pt.	
		0700-1900	All	
		1900-2400	Western Subdistrict S. of Redoubt Pt.	
11-Jul	Fri	0000-2400	Western Subdistrict S. of Redoubt Pt.	
12-Jul	Sat	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0700-2300	Kasilof Section within 1/2 mile of shore	
13-Jul	Sun	0000-2400	Western Subdistrict S. of Redoubt Pt.	
14-Jul	Mon	0000-0700	Western Subdistrict S. of Redoubt Pt.	All except north of Blanchard line latitude Kenai & Kasilof Sections
		0700-1900	All	
		1900-2100	Kenai, Kasilof & East Forelands Sections	
		1900-2400	Western Subdistrict S. of Redoubt Pt.	
15-Jul	Tue	0000-2400	Western Subdistrict S. of Redoubt Pt.	
16-Jul	Wed	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0800-2400	Kasilof Section withing 1/2 mile of shore	
17-Jul	Thu	0000-0700	W. Sub. S. of Redoubt Pt. & Kas. Sec. w/in 1/2 mile	
		0700-1900	All	
		1900-2200	Kenai, Kasilof & East Forelands Sections	
		1900-2400	Western Subdistrict S. of Redoubt Pt.	Kenai & Kasilof Sections
18-Jul	Fri	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		1400-2400	Kenai, Kasilof & East Forelands Sections	
19-Jul	Sat	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		1500-2400	Kenai, Kasilof & East Forelands Sections	
20-Jul	Sun	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0000-1700	Kenai, Kasilof & East Forelands Sections	
		0500-1700		
21-Jul	Mon	0000-0700	Western Subdistrict S. of Redoubt Pt.	
		0700-1900	All	
		1900-2300	Western Subdistrict S. of Redoubt Pt.	Kenai & Kasilof Sections
		1900-2400	W. Sub. S. of Redoubt Pt. & Kenai/Kasilof Sections	
22-Jul	Tue	0000-2400	Western Subdistrict S. of Redoubt Pt.	
23-Jul	Wed	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0700-2400	Kenai, Kasilof & East Forelands Sections	
24-Jul	Thu	0000-0700	W. Sub. S. of Redoubt Pt. & Kenai/Kasilof Sections	
		0700-1900	All	
		1900-2400	Kenai, Kasilof, E. Forelands, and W. Sub. S. of R. Pt	
		1900-2400	Western Subdistrict S. of Redoubt Pt.	
25-Jul	Fri	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0700-1900	Kenai, Kasilof & East Forelands Sections	All

continued

Table 11. Commercial salmon fishing periods, Upper Cook Inlet, 2002 (page 3 of 3).

Date	Day	Time	Set Gill Net	Drift Gill Net
26-Jul	Sat	0000-2400	Western Subdistrict S. of Redoubt Pt.	Kenai & Kasilof Sections
		0500-2300		
27-Jul	Sun	0000-2400	Western Subdistrict S. of Redoubt Pt.	Kenai & Kasilof Sections
		0700-1900	Kenai, Kasilof & East Forelands Sections	
28-Jul	Mon	0000-0700	Western Subdistrict S. of Redoubt Pt.	All except s. of Kalgin and "box" e. of Kalgin
		0500-2300	All	
		1900-2400	Western Subdistrict S. of Redoubt Pt.	
29-Jul	Tue	0000-2400	Western Subdistrict S. of Redoubt Pt.	
		0500-2300		Kenai & Kasilof Sections
		0800-2000	Kenai, Kasilof & East Forelands Sections	
30-Jul	Wed	0000-2400	Western Subdistrict S. of Redoubt Pt.	Kenai & Kasilof Sections
		0500-2300		
		0900-2100	Kenai, Kasilof & East Forelands Sections	All
31-Jul	Thu	0000-0700	Western Subdistrict S. of Redoubt Pt.	
		0700-1900	All	
		1900-2300		Kenai & Kasilof Sections
1-Aug	Fri	0000-1700	Western Subdistrict S. of Redoubt Pt.	
		0500-2300		Kenai & Kasilof Sections
2-Aug	Sat	0500-2300		
3-Aug	Sun	0500-2300		Kenai & Kasilof Sections
		0600-1800	Kalgin Island Subdistrict	
		0700-2400	Kenai, Kasilof & East Forelands Sections	Kenai & Kasilof Sections
4-Aug	Mon	0000-0700	Kenai, Kasilof & East Forelands Sections	
		0500-0700		
		0700-1900	All ^a	
		1900-2300		Kenai & Kasilof Sections
5-Aug	Tue	0600-2300		
6-Aug	Wed	0600-2300		Kenai & Kasilof Sections
7-Aug	Thu	0600-0700		
		0700-1900	All ^a	All
11-Aug	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
14-Aug	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	All
18-Aug	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
21-Aug	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	All
25-Aug	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
28-Aug	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	All
1-Sep	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
4-Sep	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	All
8-Sep	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	
11-Sep	Thu	0700-1900	Northern District, Kalgin Isl, and all West Side	All
15-Sep	Mon	0700-1900	Northern District, Kalgin Isl, and all West Side	

^a Northern District reduced to two set gillnets per permit

Table 12. Age composition (in percent) of sockeye salmon escapements, Upper Cook Inlet, 2003.

Stream	Age Class											
	0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	3.3
Kenai River	0.2	0.1	0.17	12.9	0.2	59.4	8.1	0.1	0.4	18.5		
Kasilof River		0.8		35.7	0.3	27.2	29.0			7.1		
Yentna River	0.5	0.1	2.5	16.1	0.5	63.6	6.0		0.4	10.3		
Crescent River		0.4	0.1	14.4	0.3	51.1	13.4			20.3	0.09	
Fish Creek		0.3		29.6	0.4	49.4	14.0		0.3	6.0		
Packers Creek (not sampled)												

Table 13. Upper Cook Inlet salmon average weights (in pounds) by area, 2003^a.

Fishery	CHINOOK	SOCKEYE	COHO	PINK	CHUM
Upper Cook Inlet Total	20.4	5.9	6.5	3.6	6.9
A. Northern District Total	14.2	5.9	6.4	3.3	6.5
1. Northern District West	15.7	6.7	6.6	3.3	6.6
a. Trading Bay 247-10	19.2	6.0	6.5	4.1	6.5
b. Tyonek 247-20	14.6	6.1	6.9	3.0	6.8
c. Beluga 247-30	18.1	6.7	6.3	3.6	6.6
d. Susitna Flat 247-41	13.0	7.6	6.9	2.6	6.7
e. Pt. Mackenzie 247-42	20.2	5.9	6.1	3.1	6.3
f. Fire Island 247-43	18.7	5.5	7.0		6.1
2. Northern District East	10.3	5.1	6.2	3.3	6.0
a. Pt. Possession 247-70	8.9	5.5	6.2	3.3	5.9
b. Birch Hill 247-80	15.8	5.5	6.3	3.3	6.4
c. Number 3 Bay 247-90	20.8	4.7	6.0	3.4	5.6
B. Central District Total	21.0	5.9	6.5	3.6	6.9
1. East Side Set Total	21.8	5.7	6.2	3.5	6.2
a. Salamatof/EastForelands	19.8	6.2	6.2	3.4	6.2
1. Salamatof 244-41	19.9	6.2	6.5	3.7	6.8
2. East Forelands 244-42	16.9	5.9	6.0	3.2	5.9
b. Kalifonsky Beach	21.7	5.7	6.4	3.5	6.1
1. South K. Beach 244-31	21.9	5.4	6.2	3.3	6.3
2. North K. Beach 244-32	21.3	6.0	6.6	3.8	6.0
d. Cohoe/Ninilchik	22.7	5.4	6.1	3.6	6.2
1. Cohoe 244-22	20.9	5.4	5.9	3.6	6.2
2. Ninilchik 244-21	25.0	5.4	6.4	3.5	6.2
2. West Side Set Total	25.4	6.0	6.6	3.5	6.8
a. Little Jack Slough 245-50	17.7	5.2	6.7	3.1	6.9
c. Tuxedni Bay 245-30	26.3	6.1	6.5	3.6	6.8
d. Silver Salmon 245-20	11.7	5.1	6.0	3.8	
3. Kustatan Total	20.9	5.0	6.0	3.0	2.5
a. Big River 245-55	20.9	5.0	6.0		2.5
b. West Foreland 245-60	12.3	5.9	6.0	3.0	
4. Kalgin Island Total	19.8	5.5	6.3	3.6	6.1
a. West Side 246-10	19.8	5.7	6.4	3.6	6.1
b. East Side 246-20		5.2	6.2	4.1	6.3
5. Chinitna Bay Total					
6. Central District Set Total	21.8	5.7	6.3	3.5	6.5
7. Central District Drift Total	11.8	6.1	6.6	3.6	6.9
a. West Side 245-70,80,90	40.0	6.2			6.0
b. East Side 244-50,60,70	10.5	6.1	6.6	3.6	7.0
c. East Side Corridor Total	14.1	6.0	6.3	3.7	6.7
1. Kenai Corridor 244-51	4.5	6.5	7.6	3.7	6.9
2. Kasilof Corridor 244-61	19.5	5.8	5.3	4.5	8.7
3. E. Side Corridor 244-55	13.9	6.0	6.3	3.7	6.7

^a Pounds of fish divided by numbers of fish from commercial harvest tickets.

Table 14. Buyers and processors of Upper Cook Inlet fishery products, 2003.

Buyer/Processor	Plant Site	Contact	Address
The Auction Block F3785	Homer		P.O. Box 2228 Homer, AK 99603
Alaska Sea Pack Inc. F4323	Anchorage		1304 Laona Circle Anchorage, AK
Alaska Salmon Purchasers F4665	Kenai	Mark Powell	HC01 Box 240 Kenai, AK 99611-0240
Alaskan Smoked Salmon F0902	Anchorage	Chris Rosauer	8430 Laviento Dr. Anchorage, AK 99556-0083
Coal Point Trading F1757	Homer	Nancy Hillstrand	P.O. 674 Homer, Ak. 99603
Deep Creek Custom Packing F1051-5	Ninilchik	Jeff Berger	P.O. Box 39229 Ninilchik Ak. 99639
Favco Inc F0398	Anchorage	Randy Rau	P.O. Box 190968 Anchorage, AK 99519-0968
Fishhawk Fisheries F1540-1	Kenai	Steve Fick	P.O. Box 715 Astoria Or. 97103
Glacier Fresh Seafoods F1979	Seward	Keith Bailey	P.O. Box 1989 Seward, AK 99664-1989
Great Pacific Seafoods Inc. F2857	Anchorage		4401 W. Old Int. Airport Rd., Anchorage, AK
Icicle Seafoods F0135	Seward	Melody Jordan	P.O. Box 79003 Seattle Wa. 98119
Inlet Fisheries Inc. F4682-0	Kenai	Patrick Klier	P.O. Box 530 Kenai Ak. 99611
Ocean Beauty F5202/F5204	Kenai	Pat Hardina	Box 8163 Nikiski Ak. 99635
Pacific Star Seafoods F1834	Kenai	Dan Foley	520 Bridge Access Rd. Kenai, AK 99611
R & J Enterprises F3411	Kasilof	Juanita Meier	Box 165 Kasilof Ak. 99610
Salamatof Seafoods F0037-1	Kenai	Wylie Reed	P.O. Box 1450 Kenai Ak. 99615
Snug Harbor Seafoods F3894	Kenai	Paul Dale	P.O. Box 701 Kenai, AK 99611
Echo Lake Meats F4732	Soldotna		Lot 6, Block 3 Soldotna, AK 99669

Table 15. Reported personal use harvest by gear, area and species, Upper Cook Inlet, 2003.

Fishery	Harvest ^a					Total
	Chinook	Sockeye	Coho	Pink	Chum	
Did Not Fish						
Kasilof Gillnet	400	15,706	107	9	4	16,226
Kasilof Dip Net	57	43,870	592	286	30	44,835
Kenai Dip Net	1,016	223,580	1,332	1,647	249	227,824
Fish Creek Dip Net						0
No Site Reported	238	15,675	219	140	88	16,360
Total	1,711	298,831	2,250	2,082	371	305,245 ^b

^a Harvest data is expanded for permits that were not returned (~3,400) as required. Does not include educational or subsistence fishery harvests.

Table 16. Age, weight, sex, and size distribution of Pacific herring sampled by gillnet in Upper Cook Inlet, 2003.

Sample date = 30-May, 2003

Sample Region	Age	Numbers of Fish			Percent of Total	Weight		Length	
		Male	Ripe Female	Spawned Female		Mean (g)	SD	Mean (mm)	Number Measured
ESSN	3	3	3	0	6	109	13	194	6
	4	24	25	1	50	125	13	199	50
	5	5	12	1	18	135	13	207	18
	6	7	3	6	16	146	21	220	16
	7	2	0	4	6	144	21	221	6
	8	0	1	0	1	255	-	252	1
	9								
	10								
	11								
	Sample Total	41	44	12	97	133	36.4	207	97
	Sex Composition	42%	45%	12%	100%			14	

Table 17. Seldovia District tide tables, April-September, 2003 (page 1 of 3).

APRIL												MAY											
HIGH TIDES						LOW TIDES						HIGH TIDES						LOW TIDES					
Date	Day	A.M.	Time	Feet	P.M.	Date	Day	A.M.	Time	Feet	P.M.	Date	Day	A.M.	Time	Feet	P.M.	Date	Day	A.M.	Time	Feet	P.M.
1	Tue	2:20	19.1	14:30	18.8	1	Tue	8:21	-0.3	20:31	-0.3	1	Thu	3:04	19.0	15:42	17.8	1	Thu	9:24	-1.5	21:28	2.0
2	Wed	2:44	19.5	15:02	18.8	2	Wed	8:52	-0.9	20:59	0.2	2	Fri	3:30	19.1	16:16	17.6	2	Fri	9:55	-1.8	21:59	2.6
3	Thu	3:09	19.5	15:35	18.5	3	Thu	9:22	-1.1	21:28	1.1	3	Sat	3:58	18.9	16:52	17.1	3	Sat	10:27	-1.6	22:31	3.3
4	Fri	3:34	19.3	16:08	17.7	4	Fri	9:52	-0.9	21:57	2.2	4	Sun	4:27	18.3	17:29	16.2	4	Sun	10:59	-1.1	23:05	4.3
5	Sat	4:00	18.6	16:43	16.6	5	Sat	10:23	-0.3	22:27	3.5	5	Mon	4:58	17.5	18:10	15.2	5	Mon	11:34	-0.4	23:41	5.3
						Daily Light Saving Time Begins at 2:00 am																	
6	Sun	5:27	17.7	18:22	15.2	6	Sun	11:56	0.6	23:59	4.9	6	Tue	5:31	16.5	18:56	14.0	6	Tue	---	---	12:14	0.6
7	Mon	5:55	16.6	19:06	13.7	7	Mon	---	---	12:33	1.7	7	Wed	6:11	15.4	19:54	13.2	7	Wed	0:22	6.3	13:01	1.5
8	Tue	6:29	15.4	20:07	12.4	8	Tue	0:34	6.3	1:19	2.9	8	Thu	7:04	14.2	21:03	12.8	8	Thu	1:16	7.1	2:01	2.3
9	Wed	AM	14.1	21:34	11.7	9	Wed	1:22	7.6	14:26	3.8	9	Fri	8:20	13.3	22:15	13.3	9	Fri	2:31	7.4	15:15	2.7
10	Thu	8:36	13.2	23:10	12.2	10	Thu	2:43	8.4	15:58	3.9	10	Sat	9:51	13.2	23:15	14.6	10	Sat	4:00	6.7	16:30	2.5
11	Fri	10:19	13.2	---	---	11	Fri	4:30	8.1	17:23	3.0	11	Sun	11:13	14.1	---	---	11	Sun	5:17	4.9	17:34	1.8
12	Sat	0:15	13.7	11:45	14.4	12	Sat	5:52	6.4	18:22	1.5	12	Mon	0:04	16.2	12:22	15.5	12	Mon	6:16	2.5	18:27	1.0
13	Sun	0:58	15.5	12:48	16.2	13	Sun	6:48	4.0	19:09	0.1	13	Tue	0:47	18.0	13:19	17.1	13	Tue	7:06	-0.1	19:15	0.3
14	Mon	1:34	17.5	13:41	18.1	14	Mon	AM	1.4	19:51	-1.1	14	Wed	1:29	19.7	14:11	18.5	14	Wed	7:52	-2.5	20:01	-0.1
15	Tue	2:10	19.4	14:28	19.6	15	Tue	8:16	-1.1	20:32	-1.9	15	Thu	2:09	21.0	15:00	19.4	15	Thu	8:37	-4.4	20:46	-0.1
16	Wed	2:45	21.0	15:14	20.6	16	Wed	8:58	-3.2	21:12	-2.0	16	Fri	2:51	21.8	15:49	19.7	16	Fri	9:21	-5.6	21:31	0.2
17	Thu	3:22	22.1	16:00	20.9	17	Thu	9:40	-4.7	21:53	-1.5	17	Sat	3:33	22.0	16:38	19.4	17	Sat	10:07	-5.8	22:17	0.9
18	Fri	4:00	22.4	16:47	20.4	18	Fri	10:23	-5.2	22:35	-0.5	18	Sun	4:17	21.4	17:28	18.6	18	Sun	10:53	-5.2	23:05	1.9
19	Sat	4:39	22.0	17:36	19.2	19	Sat	11:08	-4.8	23:19	1.0	19	Mon	5:04	20.2	18:21	17.4	19	Mon	11:42	-3.9	23:56	3.1
20	Sun	5:22	20.8	18:28	17.6	20	Sun	11:55	-3.6	---	---	20	Tue	5:53	18.4	19:18	16.2	20	Tue	---	---	12:34	-2.2
21	Mon	6:08	19.0	19:29	15.8	21	Mon	0:07	2.8	12:48	-1.8	21	Wed	6:48	16.5	20:22	15.1	21	Wed	0:53	4.4	13:31	-0.3
22	Tue	7:01	16.9	20:42	14.4	22	Tue	1:03	4.5	13:50	0.2	22	Thu	7:53	14.7	21:31	14.6	22	Thu	2:00	5.3	14:37	1.3
23	Wed	8:09	15.0	22:10	13.8	23	Wed	2:12	6.0	15:09	1.7	23	Fri	9:10	13.4	22:39	14.7	23	Fri	3:20	5.6	15:48	2.4
24	Thu	9:37	13.7	23:32	14.3	24	Thu	3:44	6.5	16:38	2.3	24	Sat	10:34	12.9	23:35	15.1	24	Sat	4:43	5.0	16:56	3.0
25	Fri	11:14	13.6	---	---	25	Fri	5:18	5.7	17:52	2.2	25	Sun	11:48	13.2	---	---	25	Sun	5:49	3.8	17:52	3.3
26	Sat	0:31	15.2	12:27	14.4	26	Sat	6:26	4.2	PM	1.8	26	Mon	0:19	15.8	12:46	13.9	26	Mon	6:39	2.5	18:36	3.5
27	Sun	1:13	16.2	13:19	15.3	27	Sun	7:13	2.7	19:24	1.6	27	Tue	0:54	16.4	13:32	14.7	27	Tue	7:19	1.2	19:15	3.5
28	Mon	1:45	17.1	14:00	16.2	28	Mon	7:50	1.2	19:57	1.4	28	Wed	1:25	17.1	14:12	15.5	28	Wed	7:54	0.1	19:50	3.5
29	Tue	2:13	17.9	14:35	17.0	29	Tue	8:23	0.0	20:27	1.4	29	Thu	1:55	17.7	14:49	16.2	29	Thu	8:27	-0.8	20:25	3.5
30	Wed	2:38	18.6	15:09	17.5	30	Wed	8:54	-0.9	20:57	1.6	30	Fri	2:26	18.2	15:26	16.6	30	Fri	9:00	-1.5	21:00	3.6
												31	Sat	2:58	18.4	16:02	16.8	31	Sat	9:33	-1.9	21:35	3.8

- continued -

Table 17. Seldovia District tide tables, April-September, 2003 (page 2 of 3).

June										July											
HIGH TIDES					LOW TIDES					HIGH TIDES					LOW TIDES						
Date	Day	A.M. Time	Feet	P.M. Time	Date	Day	A.M. Time	Feet	P.M. Time	Date	Day	A.M. Time	Feet	P.M. Time	Date	Day	A.M. Time	Feet	P.M. Time		
1	Sun	3:31	18.4	16:40	16.6	1	Sun	10:07	-1.9	22:12	4.1	1	Tue	3:52	18.4	17:05	16.8	10:29	-2.3	22:37	4.0
2	Mon	4:05	18.1	17:19	16.1	2	Mon	10:43	-1.7	22:49	4.6	2	Wed	4:32	18.2	17:43	16.8	11:07	-2.2	23:18	4.0
3	Tue	4:41	17.5	18:01	15.6	3	Tue	11:21	-1.3	23:30	5.1	3	Thu	5:13	17.8	18:23	16.7	11:46	-1.7	---	---
4	Wed	5:20	16.8	18:45	15.0	4	Wed	---	---	12:01	-0.6	4	Fri	5:59	17.0	19:04	16.6	0:03	4.0	12:27	-1.1
5	Thu	6:05	15.8	19:35	14.6	5	Thu	0:15	5.6	12:47	0.1	5	Sat	6:50	16.0	19:48	16.5	0:53	3.9	13:12	0.1
6	Fri	6:59	14.8	20:28	14.5	6	Fri	1:09	5.9	13:39	0.9	6	Sun	7:49	14.9	20:37	16.6	1:49	3.7	14:03	1.4
7	Sat	8:06	14.0	21:24	14.9	7	Sat	2:14	5.7	14:38	1.7	7	Mon	9:00	14.0	21:30	16.8	2:54	3.2	15:01	2.7
8	Sun	9:24	13.6	22:20	15.8	8	Sun	3:27	5.0	15:42	2.2	8	Tue	10:19	13.7	22:28	17.3	4:05	2.3	16:07	3.7
9	Mon	10:44	13.8	23:13	16.9	9	Mon	4:40	3.4	16:47	2.4	9	Wed	11:40	14.1	23:28	17.9	5:16	0.9	17:16	4.2
10	Tue	11:57	14.7	---	---	10	Tue	5:44	1.3	17:47	2.4	10	Thu	---	---	12:53	15.1	6:21	-0.7	18:21	4.1
11	Wed	0:03	18.2	13:02	16.0	11	Wed	6:40	-0.9	18:44	2.2	11	Fri	0:27	18.7	13:54	16.3	7:18	-2.2	19:21	3.6
12	Thu	0:52	19.5	13:59	17.2	12	Thu	7:31	-2.9	19:36	1.9	12	Sat	1:24	19.5	14:47	17.4	8:11	-3.5	20:16	2.9
13	Fri	1:40	20.5	14:51	18.1	13	Fri	8:20	-4.4	20:26	1.7	13	Sun	2:17	20.2	15:35	18.2	8:59	-4.3	21:06	2.3
14	Sat	2:28	21.1	15:41	18.6	14	Sat	9:08	-5.3	21:15	1.6	14	Mon	3:07	20.5	16:20	18.7	9:45	-4.5	21:54	1.9
15	Sun	3:16	21.2	16:30	18.7	15	Sun	9:55	-5.4	22:04	1.8	15	Tue	3:55	20.4	17:02	18.8	0:28	-4.2	22:40	1.8
16	Mon	4:03	20.7	17:18	18.4	16	Mon	10:41	-4.9	22:53	2.2	16	Wed	4:40	19.8	17:43	18.5	11:09	-3.3	23:26	2.1
17	Tue	4:52	19.7	18:07	17.7	17	Tue	11:28	-3.8	23:44	2.9	17	Thu	5:25	18.7	18:23	18.0	11:50	-2.0	---	---
18	Wed	5:41	18.3	18:57	16.9	18	Wed	---	---	12:15	-2.3	18	Fri	6:10	17.3	19:02	17.2	0:11	2.6	12:29	-0.4
19	Thu	6:32	16.7	19:48	16.2	19	Thu	0:37	3.6	13:04	-0.6	19	Sat	6:56	15.8	19:41	16.4	0:59	3.2	13:09	1.4
20	Fri	7:28	15.0	20:40	15.5	20	Fri	1:35	4.3	13:55	1.1	20	Sun	7:47	14.2	20:22	15.7	1:49	3.9	13:50	3.3
21	Sat	8:30	13.6	21:32	15.1	21	Sat	2:39	4.7	14:49	2.7	21	Mon	8:46	12.9	21:06	15.1	2:46	4.3	14:37	5.0
22	Sun	9:41	12.6	22:23	15.0	22	Sun	3:49	4.6	15:47	4.0	22	Tue	9:59	12.1	21:57	14.7	3:51	4.5	15:35	6.4
23	Mon	10:56	12.4	23:11	15.2	23	Mon	4:57	4.0	16:46	4.9	23	Wed	11:23	12.0	22:54	14.7	5:02	4.1	16:43	7.2
24	Tue	12:06	12.7	23:55	15.6	24	Tue	5:55	3.1	17:41	5.4	24	Thu	12:39	12.6	23:53	15.1	6:06	3.3	17:52	7.3
25	Wed	---	---	13:04	13.5	25	Wed	6:43	2.0	18:31	5.6	25	Fri	---	---	13:36	13.7	6:59	2.2	18:50	6.9
26	Thu	0:37	16.1	13:52	14.3	26	Thu	7:25	0.9	19:17	5.4	26	Sat	0:47	15.9	14:20	14.8	7:43	1.0	PM	6.1
27	Fri	1:16	16.7	14:33	15.2	27	Fri	8:03	-0.1	19:58	5.1	27	Sun	1:35	16.9	14:57	15.9	8:22	-0.3	20:22	5.1
28	Sat	1:55	17.4	15:12	15.9	28	Sat	8:40	-0.9	20:39	4.7	28	Mon	2:19	17.9	15:32	16.8	8:59	-1.3	21:02	4.2
29	Sun	2:34	17.9	15:50	16.4	29	Sun	9:16	-1.6	21:18	4.4	29	Tue	3:00	18.8	16:06	17.6	9:34	-2.2	21:41	3.3
30	Mon	3:13	18.3	16:27	16.7	30	Mon	9:52	-2.1	21:57	4.2	30	Wed	3:40	19.4	16:40	18.2	10:10	-2.7	22:20	2.6
						31	Thu	4:21	19.6	17:15	18.6	31	Thu	4:21	19.6	17:15	18.6	10:46	-2.7	23:01	2.0

- continued -

Table 17. Seldovia District tide tables, April-September, 2003 (page 3 of 3).

August												September											
HIGH TIDES						LOW TIDES						HIGH TIDES						LOW TIDES					
Date	Day	A.M. Time	Feet	P.M. Time	Feet	Date	Day	A.M. Time	Feet	P.M. Time	Feet	Date	Day	A.M. Time	Feet	P.M. Time	Feet	Date	Day	A.M. Time	Feet	P.M. Time	Feet
1	Fri	5:03	19.3	17:50	18.8	1	Fri	11:23	-2.2	23:44	1.7	1	Mon	6:21	18.2	18:30	19.7	1	Mon	0:05	-0.6	12:17	1.3
2	Sat	5:47	18.5	18:27	18.7	2	Sat	---	---	12:02	-1.2	2	Tue	7:18	16.4	19:16	18.6	2	Tue	0:56	0.1	13:05	3.3
3	Sun	6:36	17.3	19:07	18.4	3	Sun	0:30	1.6	12:44	0.3	3	Wed	8:27	14.7	20:14	17.3	3	Wed	1:55	1.1	14:04	5.3
4	Mon	7:32	15.8	19:53	17.9	4	Mon	1:22	1.7	13:31	2.1	4	Thu	9:57	13.7	21:29	16.2	4	Thu	3:11	1.9	15:22	6.8
5	Tue	8:40	14.4	20:47	17.4	5	Tue	2:22	1.9	14:28	3.9	5	Fri	11:37	14.0	22:59	16.0	5	Fri	4:43	2.0	16:56	6.9
6	Wed	10:03	13.6	21:52	17.0	6	Wed	3:35	1.9	15:38	5.3	6	Sat	---	---	12:52	15.3	6	Sat	6:06	1.2	18:18	5.9
7	Thu	11:34	13.8	23:05	17.1	7	Thu	4:55	1.3	16:57	5.9	7	Sun	0:20	16.8	13:45	16.8	7	Sun	7:08	0.0	19:18	4.3
8	Fri	---	---	12:53	14.8	8	Fri	6:11	0.2	18:14	5.5	8	Mon	1:22	18.0	14:26	18.1	8	Mon	7:55	-1.0	20:06	2.7
9	Sat	0:17	17.7	13:53	16.2	9	Sat	7:13	-1.1	19:18	4.5	9	Tue	2:11	19.1	15:01	19.2	9	Tue	8:34	-1.7	20:46	1.3
10	Sun	1:21	18.6	14:41	17.5	10	Sun	8:05	-2.2	20:11	3.2	10	Wed	2:53	19.9	15:32	19.9	10	Wed	9:09	-1.8	21:24	0.4
11	Mon	2:15	19.6	15:23	18.6	11	Mon	8:50	-3.0	20:58	2.1	11	Thu	3:30	20.2	16:01	20.2	11	Thu	9:41	-1.5	21:59	-0.1
12	Tue	3:02	20.2	16:00	19.2	12	Tue	9:31	-3.3	21:41	1.3	12	Fri	4:06	20.1	16:28	20.2	12	Fri	10:12	-0.8	22:32	-0.1
13	Wed	3:45	20.4	16:36	19.5	13	Wed	10:08	-3.1	22:22	0.9	13	Sat	4:41	19.5	16:55	19.7	13	Sat	10:42	0.3	23:06	0.2
14	Thu	4:25	20.1	17:09	19.4	14	Thu	10:48	-2.3	23:01	1.0	14	Sun	5:16	18.5	17:22	19.0	14	Sun	11:12	1.8	23:39	1.0
15	Fri	5:04	19.3	17:40	19.0	15	Fri	11:17	-1.1	23:39	1.4	15	Mon	5:52	17.2	17:49	18.0	15	Mon	11:43	3.4	---	---
16	Sat	5:43	18.1	18:11	18.3	16	Sat	11:50	0.5	---	---	16	Tue	6:32	15.6	18:18	16.8	16	Tue	0:13	2.0	12:15	5.1
17	Sun	6:23	16.6	18:42	17.3	17	Sun	0:18	2.1	12:23	2.3	17	Wed	7:19	14.0	18:52	15.5	17	Wed	0:51	3.2	12:51	6.8
18	Mon	7:06	15.0	19:15	16.3	18	Mon	0:58	3.0	12:58	4.2	18	Thu	8:23	12.6	19:39	14.2	18	Thu	1:40	4.4	13:39	8.4
19	Tue	7:57	13.5	19:54	15.3	19	Tue	1:43	3.9	13:37	6.0	19	Fri	10:01	11.9	21:00	13.3	19	Fri	2:53	5.3	15:03	9.4
20	Wed	9:05	12.2	20:44	14.4	20	Wed	2:40	4.7	14:29	7.6	20	Sat	11:51	12.5	22:42	13.5	20	Sat	4:37	5.3	16:57	9.2
21	Thu	10:40	11.7	21:54	13.9	21	Thu	3:57	5.1	15:48	8.6	21	Sun	---	---	12:50	13.9	21	Sun	5:59	4.1	18:14	7.8
22	Fri	12:20	12.4	23:16	13.6	22	Fri	5:27	4.6	17:21	8.6	22	Mon	0:02	14.8	13:26	15.5	22	Mon	6:49	2.5	19:02	5.8
23	Sat	---	---	13:20	13.6	23	Sat	6:34	3.4	18:33	7.7	23	Tue	0:58	16.5	13:57	17.2	23	Tue	7:28	0.9	19:42	3.7
24	Sun	0:25	15.2	14:00	15.0	24	Sun	7:22	1.9	19:23	6.3	24	Wed	1:44	18.3	14:26	18.9	24	Wed	8:04	-0.5	20:20	1.6
25	Mon	1:19	16.7	14:33	16.4	25	Mon	8:00	0.3	20:05	4.7	25	Thu	2:26	19.9	14:57	20.4	25	Thu	8:39	-1.5	20:58	-0.4
26	Tue	2:03	18.2	15:04	17.8	26	Tue	8:35	-1.1	20:43	3.1	26	Fri	3:08	21.0	15:29	21.6	26	Fri	9:15	-1.9	21:36	-1.9
27	Wed	2:45	19.5	15:35	19.0	27	Wed	9:10	-2.1	21:21	1.7	27	Sat	3:50	21.5	16:03	22.3	27	Sat	9:52	-1.7	22:16	-2.9
28	Thu	15:25	20.5	16:07	20.0	28	Thu	9:44	-2.7	21:59	0.4	28	Sun	4:33	21.2	16:38	22.3	28	Sun	10:30	-0.8	22:58	-3.0
29	Fri	16:06	20.8	16:39	20.6	29	Fri	10:20	-2.6	22:39	-0.4	29	Mon	5:19	20.2	17:17	21.6	29	Mon	11:11	0.6	23:44	-2.4
30	Sat	4:48	20.6	17:13	20.8	30	Sat	10:57	-1.9	23:21	-0.8	30	Tue	AM	18.6	17:59	20.3	30	Tue	11:55	2.5	---	---
31	Sun	5:33	19.7	17:50	20.5	31	Sun	11:36	-0.6	---	---												

Table 18. Total sockeye salmon harvest from all sources in Upper Cook Inlet, 2003.

Year	Commercial			Sport ^{a,b}			Personal Use					Subsistence/Educational		Total
	Drift	Set	All	Kenai River	All Other UCI	All	Kasilof Gillnet	Kasilof Dipnet	Kenai Dipnet	Other ^d	All	Subsistence	Educational ^e	
1996	2,205,067	1,683,855	3,888,922	205,959	15,640	221,599	9,506	11,197	102,821	22,021	145,545	1,599	2,242	4,259,907
1997	2,197,736	1,979,002	4,176,738	190,679	22,466	213,145	17,997	9,737	114,619	6,587	148,940	2,138	2,884	4,543,845
1998	599,202	620,040	1,219,242	190,159	22,246	212,405	15,975	45,161	103,847	11,598	176,581	2,308	3,266	1,613,802
1999	1,413,995	1,266,515	2,680,510	233,768	26,078	259,846	12,832	37,176	149,504	6,928	208,589	2,149	2,690	3,153,784
2000	656,427	666,055	1,322,482	261,779	32,194	293,973	14,774	23,877	98,262	10,603	149,267	1,751	2,713	1,770,186
2001	846,257	980,576	1,826,833	219,507	30,953	250,460	17,201	37,612	150,766	10,579	218,688	2,530	4,510	2,303,021
2002	1,367,251	1,405,867	2,773,118	259,883	21,770	281,653	17,980	46,769	180,028	2,223	249,864	2,864	3,366	3,310,865
2003	1,593,638	1,882,521	3,476,159	c	c	c	15,706	43,870	223,580	11,406	298,831	4,269	5,171	3,784,430

^a Sport harvest in the Kenai River includes late-run stock only; early-run Russian River sockeye salmon harvest is excluded.

^b Sport harvest is estimated from the annual state-wide sportfish harvest survey.

^c Sport harvest in 2003 is unknown until the state-wide harvest survey is finalized.

^d Specific area of harvest not identified on returned permits.

^e Educational fisheries consist of Kenaitze Tribal Council, Ninilchik Traditional Council, and Ninilchik Native Descendents.

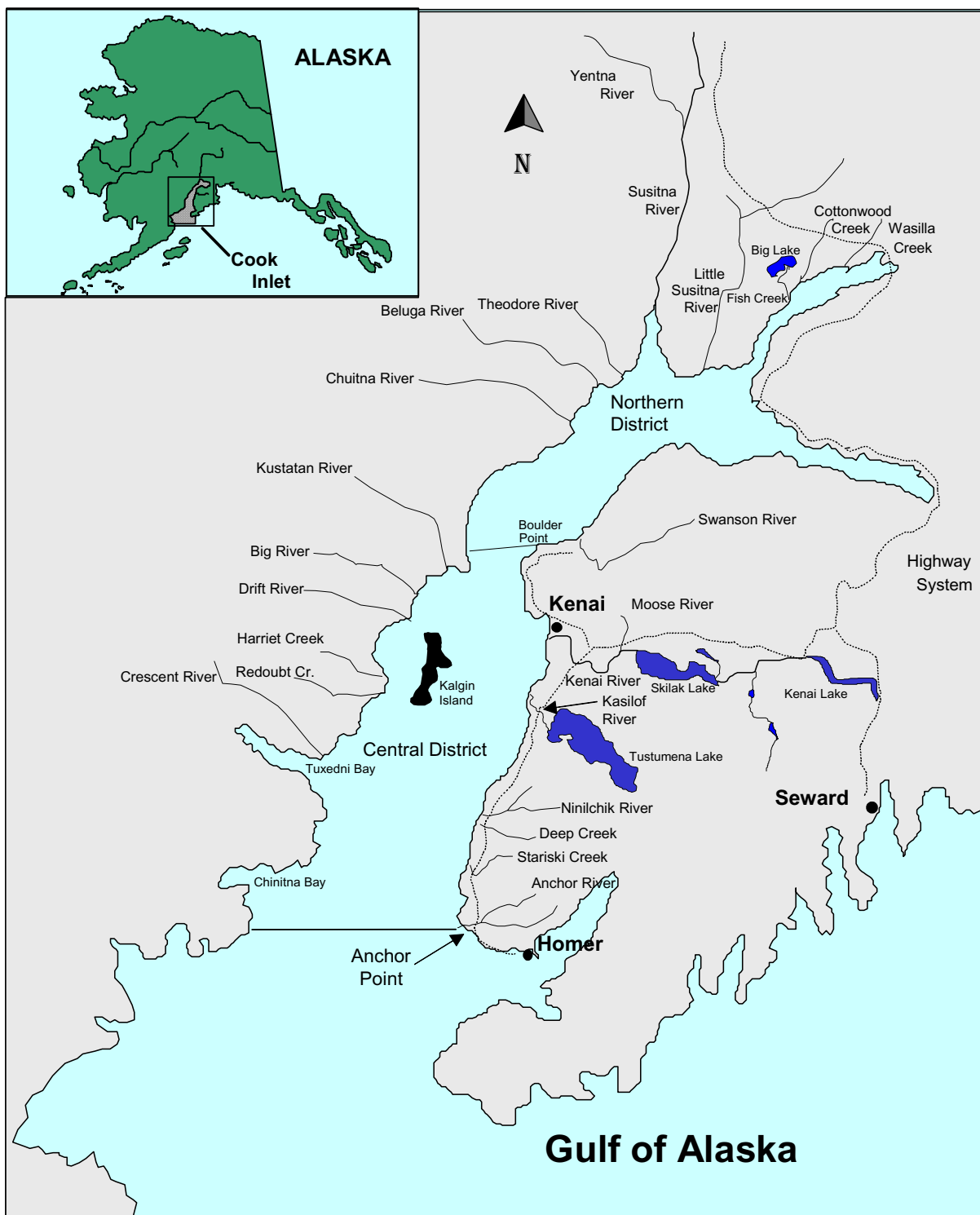


Figure 1. Major tributaries of the Cook Inlet Basin.

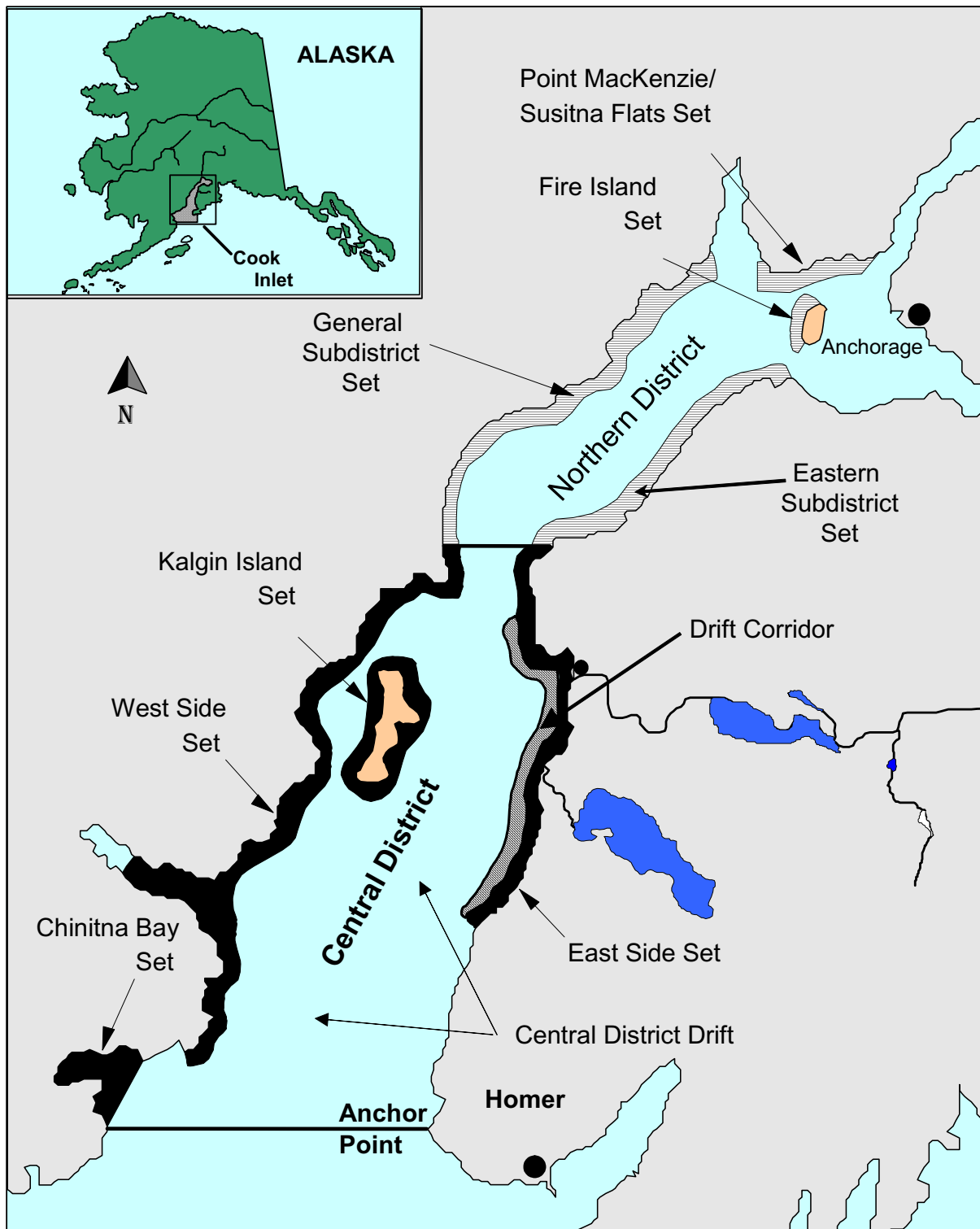


Figure 2. Upper Cook Inlet commercial fisheries subdistrict fishing boundaries.

Appendix A.1. Upper Cook Inlet commercial chinook salmon harvest by gear type and area, 1966-2003.

Year	Central District		Central District Set Gillnet				Northern District		Total
	Drift Gillnet		East Side		Kalgin/West Side		Set Gillnet		
	Number ^b	%	Number ^b	%	Number ^b	%	Number ^b	%	
1966	392	4.6	7,329	85.8	401	4.7	422	4.9	8,544
1967	489	6.2	6,686	85.1	500	6.4	184	2.3	7,859
1968	182	4.0	3,304	72.8	579	12.8	471	10.4	4,536
1969	362	2.9	5,834	47.1	3,286	26.5	2,904	23.4	12,386
1970	356	4.3	5,368	64.4	1,152	13.8	1,460	17.5	8,336
1971	237	1.2	7,055	35.7	2,875	14.5	9,598	48.6	19,765
1972	375	2.3	8,599	53.5	2,199	13.7	4,913	30.5	16,086
1973	244	4.7	4,411	84.9	369	7.1	170	3.3	5,194
1974	422	6.4	5,571	84.5	434	6.6	169	2.6	6,596
1975	250	5.2	3,675	76.8	733	15.3	129	2.7	4,787
1976	690	6.4	8,249	75.9	1,469	13.5	457	4.2	10,865
1977	3,411	23.1	9,730	65.8	1,084	7.3	565	3.8	14,790
1978	2,072	12.0	12,468	72.1	2,093	12.1	666	3.8	17,299
1979	1,089	7.9	8,671	63.1	2,264	16.5	1,714	12.5	13,738
1980	889	6.4	9,643	69.9	2,273	16.5	993	7.2	13,798
1981	2,320	19.0	8,358	68.3	837	6.8	725	5.9	12,240
1982	1,293	6.2	13,658	65.4	3,203	15.3	2,716	13.0	20,870
1983	1,125	5.5	15,042	72.9	3,534	17.1	933	4.5	20,634
1984	1,377	13.7	6,165	61.3	1,516	15.1	1,004	10.0	10,062
1985	2,048	8.5	17,723	73.6	2,427	10.1	1,890	7.8	24,088
1986	1,834	4.7	19,824	50.5	2,108	5.4	15,488	39.5	39,254
1987	4,552	11.5	21,150	53.6	1,029	2.6	12,700	32.2	39,431
1988	2,237	7.7	12,870	44.3	1,137	3.9	12,836	44.1	29,080
1989			10,914	40.8	3,092	11.6	12,731	47.6	26,737
1990	621	3.9	4,139	25.7	1,763	10.9	9,582	59.5	16,105
1991	246	1.8	4,893	36.1	1,544	11.4	6,859	50.6	13,542
1992	615	3.6	10,718	62.4	1,284	7.5	4,554	26.5	17,171
1993	765	4.1	14,079	74.6	720	3.8	3,307	17.5	18,871
1994	464	2.3	15,562	78.0	730	3.7	3,185	16.0	19,941
1995	594	3.3	12,068	67.4	1,101	6.2	4,130	23.1	17,893
1996	389	2.7	11,564	80.8	395	2.8	1,958	13.7	14,306
1997	627	4.7	11,325	85.2	207	1.6	1,133	8.5	13,292
1998	335	4.1	5,087	62.6	155	1.9	2,547	31.4	8,124
1999	575	4.0	9,463	65.8	1,533	10.7	2,812	19.6	14,383
2000	270	3.7	3,684	50.1	1,089	14.8	2,307	31.4	7,350
2001	619	6.7	6,009	64.6	856	9.2	1,811	19.5	9,295
2002	415	3.3	9,478	74.5	926	7.3	1,895	14.9	12,714
2003	1,240	6.7	14,810	80.1	770	4.2	1,670	9.0	18,490
1966-02 Avg ^a	966	6.2	9,429	65.4	1,383	9.9	3,311	18.5	15,090
1993-02 Avg	505	3.9	9,832	70.4	771	6.2	2,509	19.5	13,617

^a 1989 not used in average as the drift fleet did not fish due to the Exxon Valdez oil spill and this had an effect on all other fisheries.

^b Harvest data prior to 2003 reflect minor adjustments to historical catch database.

Appendix A.2. Upper Cook Inlet commercial sockeye salmon harvest by gear type and area, 1966-2003.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet		Total
	Number ^b	%	East Side		Kalgin/West Side				
			Number ^b	%	Number ^b	%			
1966	1,103,261	59.6	485,330	26.2	132,443	7.2	131,080	7.1	1,852,114
1967	890,152	64.5	305,431	22.1	66,414	4.8	118,065	8.6	1,380,062
1968	561,737	50.8	317,535	28.7	85,049	7.7	140,575	12.7	1,104,896
1969	371,747	53.7	210,834	30.5	71,184	10.3	38,050	5.5	691,815
1970	460,690	62.9	142,701	19.5	62,723	8.6	66,458	9.1	732,572
1971	423,107	66.5	111,505	17.5	61,144	9.6	40,533	6.4	636,289
1972	506,281	57.5	204,599	23.3	83,176	9.5	85,755	9.7	879,811
1973	375,695	56.1	188,816	28.2	59,973	8.9	45,614	6.8	670,098
1974	265,771	53.5	136,889	27.5	52,962	10.7	41,563	8.4	497,185
1975	368,124	53.8	177,336	25.9	73,765	10.8	65,526	9.6	684,751
1976	1,055,786	63.4	476,376	28.6	62,338	3.7	69,649	4.2	1,664,149
1977	1,073,098	52.3	751,178	36.6	104,265	5.1	123,750	6.0	2,052,291
1978	1,803,479	68.8	660,797	25.2	105,767	4.0	51,378	2.0	2,621,421
1979	454,707	49.2	247,359	26.8	108,422	11.7	113,918	12.3	924,406
1980	770,247	48.9	559,812	35.6	137,882	8.8	105,647	6.7	1,573,588
1981	633,380	44.0	496,003	34.5	60,217	4.2	249,662	17.3	1,439,262
1982	2,103,429	64.5	971,423	29.8	66,952	2.1	118,060	3.6	3,259,864
1983	3,222,428	63.8	1,508,511	29.9	134,575	2.7	184,219	3.6	5,049,733
1984	1,235,337	58.6	490,273	23.3	162,139	7.7	218,965	10.4	2,106,714
1985	2,032,957	50.1	1,561,200	38.4	285,081	7.0	181,191	4.5	4,060,429
1986	2,837,857	59.2	1,658,161	34.6	153,714	3.2	141,830	3.0	4,791,562
1987	5,638,916	59.6	3,454,470	36.5	208,036	2.2	164,572	1.7	9,465,994
1988	4,139,358	60.5	2,428,385	35.5	146,377	2.1	129,713	1.9	6,843,833
1989			4,543,492	90.7	186,831	3.7	280,801	5.6	5,011,124
1990	2,305,331	64.0	1,117,581	31.0	84,949	2.4	96,398	2.7	3,604,259
1991	1,118,115	51.3	844,156	38.8	99,859	4.6	116,201	5.3	2,178,331
1992	6,069,495	66.6	2,838,076	31.2	131,304	1.4	69,478	0.8	9,108,353
1993	2,558,732	53.8	1,941,783	40.8	108,181	2.3	146,633	3.1	4,755,329
1994	1,901,452	53.3	1,458,162	40.9	85,830	2.4	120,142	3.4	3,565,586
1995	1,773,873	60.1	961,216	32.6	107,640	3.6	109,098	3.7	2,951,827
1996	2,205,067	56.7	1,483,008	38.1	96,719	2.5	104,128	2.7	3,888,922
1997	2,197,736	52.6	1,832,824	43.9	48,723	1.2	97,455	2.3	4,176,738
1998	599,202	49.1	512,225	42.0	47,165	3.9	60,650	5.0	1,219,242
1999	1,413,995	52.8	1,092,946	40.8	114,454	4.3	59,115	2.2	2,680,510
2000	656,427	49.6	529,747	40.1	92,477	7.0	43,831	3.3	1,322,482
2001	846,257	46.3	870,019	47.6	59,709	3.3	50,848	2.8	1,826,833
2002	1,367,251	49.3	1,303,158	47.0	69,609	2.5	33,100	1.2	2,773,118
2003	1,593,638	45.8	1,746,841	50.3	87,193	2.5	48,487	1.4	3,476,159
1966-02 Avg ^a	1,592,791	56.3	953,606	32.8	100,867	5.4	103,690	5.5	2,750,955
1993-02 Avg	1,551,999	52.4	1,198,509	41.4	83,051	3.3	82,500	3.0	2,916,059

^a 1989 not used in average as the drift fleet did not fish due to the Exxon Valdez oil spill and this had an effect on all other fisheries.

^b Harvest data prior to 2003 reflect minor adjustments to historical catch database.

Appendix A.3. Upper Cook Inlet commercial coho salmon harvest by gear type and area, 1966-2003.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet		Total
	Number ^b	%	East Side		Kalgin/West Side		Number ^b	%	
			Number ^b	%	Number ^b	%			
1966	80,901	27.9	68,877	23.8	59,509	20.5	80,550	27.8	289,837
1967	53,071	29.9	40,738	22.9	40,066	22.5	43,854	24.7	177,729
1968	167,383	35.8	80,828	17.3	63,301	13.5	156,648	33.5	468,160
1969	33,053	32.8	18,988	18.9	28,231	28.0	20,412	20.3	100,684
1970	110,070	40.0	30,114	10.9	52,299	19.0	82,722	30.1	275,205
1971	35,491	35.4	16,589	16.5	26,188	26.1	22,094	22.0	100,362
1972	21,577	26.7	24,673	30.5	15,300	18.9	19,346	23.9	80,896
1973	31,784	30.4	23,901	22.9	24,784	23.7	23,951	22.9	104,420
1974	75,640	37.8	36,837	18.4	40,610	20.3	47,038	23.5	200,125
1975	88,579	39.0	46,209	20.3	59,537	26.2	33,051	14.5	227,376
1976	80,712	38.7	47,873	22.9	42,243	20.2	37,835	18.1	208,663
1977	110,184	57.2	23,693	12.3	38,093	19.8	20,623	10.7	192,593
1978	76,259	34.8	34,134	15.6	61,711	28.2	47,089	21.5	219,193
1979	114,496	43.2	29,284	11.0	68,306	25.8	53,078	20.0	265,164
1980	89,510	33.0	40,281	14.8	51,527	19.0	90,098	33.2	271,416
1981	226,366	46.7	36,024	7.4	88,390	18.2	133,625	27.6	484,405
1982	416,274	52.5	108,393	13.7	182,205	23.0	85,352	10.8	792,224
1983	326,965	63.3	37,694	7.3	97,796	18.9	53,867	10.4	516,322
1984	213,423	47.4	37,166	8.3	84,618	18.8	114,786	25.5	449,993
1985	357,388	53.6	70,657	10.6	147,331	22.1	91,837	13.8	667,213
1986	506,818	66.9	76,461	10.1	85,932	11.4	88,108	11.6	757,319
1987	202,506	44.8	74,923	16.6	74,930	16.6	97,062	21.9	449,421
1988	278,828	49.6	54,975	9.9	77,403	13.8	149,742	26.7	560,948
1989	743	0.2	82,333	24.1	81,004	23.9	175,738	51.8	339,818
1990	247,357	49.3	40,351	8.0	73,429	14.6	140,506	28.0	501,643
1991	175,782	41.2	30,435	7.1	87,968	20.6	132,302	31.0	426,487
1992	267,300	57.0	57,078	12.2	53,419	11.4	91,133	19.4	468,930
1993	121,829	39.7	43,098	14.0	35,661	11.6	106,294	34.6	306,882
1994	310,114	52.7	68,449	11.9	61,166	10.5	144,064	24.8	583,793
1995	241,473	54.0	44,750	10.0	71,431	16.0	89,300	20.0	446,954
1996	171,434	53.3	40,724	12.6	31,405	9.8	78,105	24.3	321,668
1997	78,662	51.6	19,668	12.9	16,705	11.0	37,369	24.5	152,404
1998	83,338	51.9	18,677	11.6	24,286	15.1	34,359	21.4	160,660
1999	64,814	51.5	11,923	9.3	17,725	14.1	31,446	25.1	125,908
2000	131,478	55.5	11,078	4.7	22,840	9.6	71,475	30.2	236,871
2001	39,418	34.8	4,246	3.7	23,719	20.9	45,928	40.5	113,311
2002	125,831	51.1	35,153	14.3	35,005	14.2	50,292	20.4	246,281
2003	52,432	51.5	10,171	10.0	15,138	14.9	24,015	23.6	101,756
1966-02 Avg ^a	159,892	44.8	41,248	13.8	57,363	18.2	73,482	23.3	331,985
1993-02 Avg	136,839	49.6	29,777	10.5	33,994	13.3	68,863	26.6	269,473

^a 1989 not used in average as the drift fleet did not fish due to the Exxon Valdez oil spill and this had an effect on all other fisheries.

^b Harvest data prior to 2003 reflect minor adjustments to historical catch database.

Appendix A.4. Upper Cook Inlet commercial pink salmon harvest by gear type and area, 1966-2003.

Year	Central District		Central District Set Gillnet				Northern District		Total
	Drift Gillnet		East Side		Kalgin/West Side		Set Gillnet		
	Number ^b	%	Number ^b	%	Number ^b	%	Number ^b	%	
1966	593,654	29.6	969,624	48.3	70,507	3.5	371,960	18.5	2,005,745
1967	7,475	23.2	13,038	40.5	3,256	10.1	8,460	26.2	32,229
1968	880,512	38.7	785,887	34.5	75,755	3.3	534,839	23.5	2,276,993
1969	8,233	25.3	10,968	33.7	5,711	17.6	7,587	23.3	32,499
1970	334,737	41.1	281,067	34.5	24,763	3.0	174,193	21.4	814,760
1971	6,433	18.1	18,097	50.8	2,637	7.4	8,423	23.7	35,590
1972	115,117	18.3	403,706	64.2	18,913	3.0	90,830	14.5	628,566
1973	91,901	28.2	80,596	24.7	16,437	5.0	137,250	42.1	326,184
1974	140,432	29.0	291,408	60.2	9,014	1.9	42,876	8.9	483,730
1975	113,868	33.9	112,423	33.4	19,086	5.7	90,953	27.0	336,330
1976	599,594	47.7	479,024	38.1	30,030	2.4	148,080	11.8	1,256,728
1977	286,308	51.7	125,817	22.7	25,212	4.6	116,518	21.0	553,855
1978	934,442	55.3	372,601	22.1	54,785	3.2	326,614	19.3	1,688,442
1979	19,554	26.8	19,983	27.4	7,061	9.7	26,382	36.1	72,980
1980	964,526	54.0	299,444	16.8	47,963	2.7	474,488	26.6	1,786,421
1981	53,888	42.4	15,654	12.3	4,276	3.4	53,325	41.9	127,143
1982	270,380	34.2	432,715	54.7	14,242	1.8	73,307	9.3	790,644
1983	26,629	37.9	18,309	26.0	3,785	5.4	21,604	30.7	70,327
1984	273,565	44.3	220,895	35.8	16,708	2.7	106,284	17.2	617,452
1985	34,228	39.0	17,715	20.2	5,653	6.4	30,232	34.4	87,828
1986	615,522	47.3	530,955	40.8	15,460	1.2	139,002	10.7	1,300,939
1987	38,714	35.4	47,235	43.2	5,229	4.8	18,203	16.6	109,381
1988	227,885	48.4	176,043	37.4	12,938	2.7	54,210	11.5	471,076
1989	1	0.0	37,982	56.3	5,580	8.3	23,878	35.4	67,441
1990	323,759	53.7	225,429	37.4	10,302	1.7	43,944	7.3	603,434
1991	5,791	39.5	2,670	18.2	1,049	7.2	5,153	35.1	14,663
1992	423,738	60.9	244,068	35.1	4,250	0.6	23,805	3.4	695,861
1993	46,463	46.0	41,690	41.3	2,313	2.3	10,468	10.4	100,934
1994	256,248	49.0	234,827	44.9	3,178	0.6	29,181	5.6	523,434
1995	64,632	48.4	53,420	40.0	3,810	2.9	11,713	8.8	133,575
1996	122,728	50.5	95,717	39.4	3,792	1.6	20,674	8.5	242,911
1997	29,917	42.2	32,046	45.2	4,701	6.6	4,269	6.0	70,933
1998	200,382	36.3	332,092	60.2	7,231	1.3	11,555	2.1	551,260
1999	3,552	22.0	9,355	57.8	2,674	16.5	593	3.7	16,174
2000	90,508	61.8	23,746	16.2	11,983	8.2	20,245	13.8	146,482
2001	31,218	43.0	32,998	45.5	3,988	5.5	4,355	6.0	72,559
2002	224,229	50.2	214,771	48.1	1,736	0.4	6,224	1.4	446,960
2003	30,369	6.8	16,474	3.7	375	0.1	1,564	0.3	48,782
1966-02 Avg ^a	235,021	40.4	201,834	37.5	15,290	4.6	90,217	17.5	542,362
1993-02 Avg	106,988	44.9	107,066	43.9	4,541	4.6	11,928	6.6	230,522

^a 1989 not used in average as the drift fleet did not fish due to the Exxon Valdez oil spill and this had an effect on all other fisheries.

^b Harvest data prior to 2003 reflect minor adjustments to historical catch database.

Appendix A.5. Upper Cook Inlet commercial chum salmon harvest by gear type and area, 1966-2003.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet		Total
	Number ^b	%	East Side		Kalgin/West Side		Number ^b	%	
			Number ^b	%	Number ^b	%			
1966	424,972	79.8	7,461	1.4	64,725	12.1	35,598	6.7	532,756
1967	233,041	78.5	399	0.1	25,013	8.4	38,384	12.9	296,837
1968	1,002,900	90.5	1,563	0.1	44,986	4.1	58,454	5.3	1,107,903
1969	238,497	89.1	399	0.1	16,954	6.3	11,836	4.4	267,686
1970	678,448	90.4	1,228	0.2	48,591	6.5	22,507	3.0	750,774
1971	274,567	84.8	128	0.0	32,647	10.1	16,603	5.1	323,945
1972	564,726	90.2	1,727	0.3	40,179	6.4	19,782	3.2	626,414
1973	605,738	90.7	1,965	0.3	29,019	4.3	30,851	4.6	667,573
1974	344,496	86.8	506	0.1	15,346	3.9	36,492	9.2	396,840
1975	886,474	93.2	980	0.1	33,347	3.5	30,787	3.2	951,588
1976	405,769	86.5	1,484	0.3	47,882	10.2	14,045	3.0	469,180
1977	1,153,454	93.5	1,413	0.1	54,708	4.4	23,861	1.9	1,233,436
1978	489,119	85.5	4,563	0.8	40,946	7.2	37,151	6.5	571,779
1979	609,239	93.8	867	0.1	30,342	4.7	9,310	1.4	649,758
1980	339,970	87.7	2,147	0.6	28,970	7.5	16,728	4.3	387,815
1981	756,922	91.0	2,386	0.3	26,461	3.2	46,208	5.6	831,977
1982	1,348,510	94.1	4,777	0.3	36,647	2.6	43,006	3.0	1,432,940
1983	1,044,636	93.7	2,822	0.3	38,079	3.4	29,321	2.6	1,114,858
1984	568,097	83.5	3,695	0.5	34,207	5.0	74,727	11.0	680,726
1985	700,848	90.7	4,133	0.5	31,746	4.1	36,122	4.7	772,849
1986	1,012,669	89.2	7,030	0.6	39,078	3.4	76,040	6.7	1,134,817
1987	211,745	60.7	16,605	4.8	53,558	15.4	66,901	19.2	348,809
1988	582,699	82.0	11,763	1.7	40,425	5.7	75,728	10.7	710,615
1989	72	0.1	12,326	10.1	27,705	22.7	81,948	67.1	122,051
1990	289,447	82.4	4,611	1.3	21,355	6.1	35,710	10.2	351,123
1991	215,469	76.9	2,387	0.9	22,974	8.2	39,393	14.1	280,223
1992	232,955	84.9	2,867	1.0	13,180	4.8	25,301	9.2	274,303
1993	88,826	72.4	2,977	2.4	5,566	4.5	25,401	20.7	122,770
1994	249,748	82.4	2,927	1.0	10,443	3.4	40,059	13.2	303,177
1995	468,224	88.4	3,711	0.7	13,820	2.6	43,667	8.2	529,422
1996	140,968	90.1	1,448	0.9	2,314	1.5	11,771	7.5	156,501
1997	92,163	89.4	1,222	1.2	1,770	1.7	7,881	7.6	103,036
1998	88,036	92.0	688	0.7	2,953	3.1	3,977	4.2	95,654
1999	166,612	95.5	373	0.2	3,567	2.0	3,989	2.3	174,541
2000	118,074	92.9	325	0.3	4,386	3.5	4,284	3.4	127,069
2001	75,599	89.5	248	0.3	6,445	7.6	2,202	2.6	84,494
2002	224,587	94.4	1,790	0.8	6,671	2.8	4,901	2.1	237,949
2003	106,467	88.2	1,933	1.6	7,861	6.5	4,483	3.7	120,744
1966-02 Avg ^a	470,229	87.1	2,934	0.7	26,925	5.4	30,527	6.8	530,615
1993-02 Avg	171,284	88.7	1,571	0.8	5,794	3.3	14,813	7.2	193,461

^a 1989 not used in average as the drift fleet did not fish due to the Exxon Valdez oil spill and this had an effect on all other fisheries.

^b Harvest data prior to 2003 reflect minor adjustments to historical catch database.

Appendix A.6. Upper Cook Inlet commercial salmon harvest by species, 1954-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1954	63,780	1,207,046	321,525	2,189,207	510,068	4,291,626
1955	45,926	1,027,528	170,777	101,680	248,343	1,594,254
1956	64,977	1,258,789	198,189	1,595,375	782,051	3,899,381
1957	42,158	643,712	125,434	21,228	1,001,470	1,834,002
1958	22,727	477,392	239,765	1,648,548	471,697	2,860,129
1959	32,651	612,676	106,312	12,527	300,319	1,064,485
1960	27,512	923,314	311,461	1,411,605	659,997	3,333,889
1961	19,737	1,162,303	117,778	34,017	349,628	1,683,463
1962	20,210	1,147,573	350,324	2,711,689	970,582	5,200,378
1963	17,536	942,980	197,140	30,436	387,027	1,575,119
1964	4,531	970,055	452,654	3,231,961	1,079,084	5,738,285
1965	9,741	1,412,350	153,619	23,963	316,444	1,916,117
1966	8,544	1,852,114	289,837	2,005,745	532,756	4,688,996
1967	7,859	1,380,062	177,729	32,229	296,837	1,894,716
1968	4,536	1,104,896	468,160	2,276,993	1,107,903	4,962,488
1969	12,386	691,815	100,684	32,499	267,686	1,105,070
1970	8,336	732,572	275,205	814,760	750,774	2,581,647
1971	19,765	636,289	100,362	35,590	323,945	1,115,951
1972	16,086	879,811	80,896	628,566	626,414	2,231,773
1973	5,194	670,098	104,420	326,184	667,573	1,773,469
1974	6,596	497,185	200,125	483,730	396,840	1,584,476
1975	4,787	684,751	227,376	336,330	951,588	2,204,832
1976	10,865	1,664,149	208,663	1,256,728	469,180	3,609,585
1977	14,790	2,052,291	192,593	553,855	1,233,436	4,046,965
1978	17,299	2,621,421	219,193	1,688,442	571,779	5,118,134
1979	13,738	924,406	265,164	72,980	649,758	1,926,046
1980	13,798	1,573,588	271,416	1,786,421	387,815	4,033,038
1981	12,240	1,439,262	484,405	127,143	831,977	2,895,027
1982	20,870	3,259,864	792,224	790,644	1,432,940	6,296,542
1983	20,634	5,049,733	516,322	70,327	1,114,858	6,771,874
1984	10,062	2,106,714	449,993	617,452	680,726	3,864,947
1985	24,088	4,060,429	667,213	87,828	772,849	5,612,407
1986	39,254	4,791,562	757,319	1,300,939	1,134,817	8,023,891
1987	39,431	9,465,994	449,421	109,381	348,809	10,413,036
1988	29,080	6,843,833	560,948	471,076	710,615	8,615,552
1989	26,737	5,011,124	339,818	67,441	122,051	5,567,171
1990	16,105	3,604,259	501,643	603,434	351,123	5,076,564
1991	13,542	2,178,331	426,487	14,663	280,223	2,913,246
1992	17,171	9,108,353	468,930	695,861	274,303	10,564,618
1993	18,871	4,755,329	306,882	100,934	122,770	5,304,786
1994	19,941	3,565,586	583,793	523,434	303,177	4,995,931
1995	17,893	2,951,827	446,954	133,575	529,422	4,079,671
1996	14,306	3,888,922	321,668	242,911	156,501	4,624,308
1997	13,292	4,176,738	152,404	70,933	103,036	4,516,403
1998	8,124	1,219,242	160,660	551,260	95,654	2,034,940
1999	14,383	2,680,510	125,908	16,174	174,541	3,011,516
2000	7,350	1,322,482	236,871	146,482	127,069	1,840,254
2001	9,295	1,826,833	113,311	72,559	84,494	2,106,492
2002	12,714	2,773,118	246,281	446,960	237,949	3,717,022
2003	18,490	3,476,159	101,756	48,782	120,744	3,765,931
Averages						
Last 50 Yrs	19,199	2,386,147	302,760	653,070	528,433	3,889,609
Last 10 Yr	13,579	2,788,142	248,961	225,307	193,259	3,469,247

^a Catch statistics prior to 2003 reflect minor adjustments to harvest database.

Appendix A. 7. Approximate exvessel value of Upper Cook Inlet commercial salmon harvest by species, 1960-2002.

Year	Chinook	%	Sockeye	%	Coho	%	Pink	%	Chum	%	Total
1960	\$ 140,000	5.0%	\$ 1,334,000	47.9%	\$ 307,000	11.0%	\$ 663,000	23.8%	\$ 343,000	12.3%	\$ 2,787,000
1961	\$ 100,000	4.7%	\$ 1,687,000	79.4%	\$ 118,000	5.6%	\$ 16,000	0.8%	\$ 204,000	9.6%	\$ 2,125,000
1962	\$ 100,000	2.5%	\$ 1,683,000	42.3%	\$ 342,000	8.6%	\$ 1,274,000	32.0%	\$ 582,000	14.6%	\$ 3,981,000
1963	\$ 89,000	4.6%	\$ 1,388,000	72.3%	\$ 193,000	10.1%	\$ 13,000	0.7%	\$ 236,000	12.3%	\$ 1,919,000
1964	\$ 20,000	0.5%	\$ 1,430,000	38.9%	\$ 451,000	12.3%	\$ 1,131,000	30.8%	\$ 646,000	17.6%	\$ 3,678,000
1965	\$ 50,000	2.0%	\$ 2,099,000	82.1%	\$ 109,000	4.3%	\$ 70,000	2.7%	\$ 230,000	9.0%	\$ 2,558,000
1966	\$ 50,000	1.2%	\$ 2,727,000	64.4%	\$ 295,000	7.0%	\$ 823,000	19.4%	\$ 338,000	8.0%	\$ 4,233,000
1967	\$ 49,000	1.9%	\$ 2,135,000	82.6%	\$ 187,000	7.2%	\$ 13,000	0.5%	\$ 202,000	7.8%	\$ 2,586,000
1968	\$ 30,000	0.7%	\$ 1,758,000	40.4%	\$ 515,000	11.8%	\$ 1,209,000	27.8%	\$ 843,000	19.4%	\$ 4,355,000
1969	\$ 70,000	4.0%	\$ 1,296,697	73.9%	\$ 134,003	7.6%	\$ 18,291	1.0%	\$ 236,404	13.5%	\$ 1,755,394
1970	\$ 89,382	3.0%	\$ 1,190,303	39.9%	\$ 468,179	15.7%	\$ 456,354	15.3%	\$ 780,622	26.2%	\$ 2,984,840
1971	\$ 189,504	9.2%	\$ 1,250,771	61.0%	\$ 137,815	6.7%	\$ 18,402	0.9%	\$ 454,483	22.2%	\$ 2,050,974
1972	\$ 224,396	6.3%	\$ 1,863,177	52.6%	\$ 137,315	3.9%	\$ 478,246	13.5%	\$ 840,057	23.7%	\$ 3,543,192
1973	\$ 121,156	2.0%	\$ 3,225,847	52.3%	\$ 318,950	5.2%	\$ 362,658	5.9%	\$ 2,135,025	34.6%	\$ 6,163,635
1974	\$ 209,712	3.2%	\$ 3,072,221	46.8%	\$ 843,048	12.8%	\$ 919,916	14.0%	\$ 1,517,637	23.1%	\$ 6,562,535
1975	\$ 63,990	1.0%	\$ 2,628,036	39.2%	\$ 838,859	12.5%	\$ 419,173	6.3%	\$ 2,752,555	41.1%	\$ 6,702,612
1976	\$ 274,172	2.0%	\$ 8,668,095	63.4%	\$ 819,006	6.0%	\$ 1,874,915	13.7%	\$ 2,041,225	14.9%	\$ 13,677,413
1977	\$ 523,776	2.4%	\$ 13,318,720	61.8%	\$ 932,540	4.3%	\$ 767,273	3.6%	\$ 5,995,611	27.8%	\$ 21,537,920
1978	\$ 661,375	2.0%	\$ 26,167,741	80.3%	\$ 1,380,312	4.2%	\$ 2,154,176	6.6%	\$ 2,217,510	6.8%	\$ 32,581,114
1979	\$ 616,360	4.2%	\$ 8,093,280	55.3%	\$ 1,640,277	11.2%	\$ 82,339	0.6%	\$ 4,199,765	28.7%	\$ 14,632,021
1980	\$ 414,771	3.2%	\$ 7,937,699	61.7%	\$ 891,098	6.9%	\$ 2,114,283	16.4%	\$ 1,513,960	11.8%	\$ 12,871,810
1981	\$ 424,390	2.3%	\$ 11,080,411	60.1%	\$ 2,623,598	14.2%	\$ 170,038	0.9%	\$ 4,150,158	22.5%	\$ 18,448,596
1982	\$ 763,267	2.4%	\$ 25,154,115	80.0%	\$ 4,080,570	13.0%	\$ 553,635	1.8%	\$ 886,129	2.8%	\$ 31,437,716
1983	\$ 590,730	2.0%	\$ 24,016,294	81.8%	\$ 1,601,976	5.5%	\$ 41,338	0.1%	\$ 3,109,814	10.6%	\$ 29,360,152
1984	\$ 310,899	1.8%	\$ 12,450,532	71.8%	\$ 2,039,681	11.8%	\$ 522,795	3.0%	\$ 2,011,253	11.6%	\$ 17,335,160
1985	\$ 799,318	2.3%	\$ 27,497,929	80.0%	\$ 3,359,824	9.8%	\$ 57,412	0.2%	\$ 2,644,995	7.7%	\$ 34,359,478
1986	\$ 915,189	2.0%	\$ 38,683,950	83.3%	\$ 2,909,043	6.3%	\$ 724,367	1.6%	\$ 3,197,973	6.9%	\$ 46,430,522
1987	\$ 1,609,777	1.6%	\$ 95,915,522	94.9%	\$ 2,373,254	2.3%	\$ 84,439	0.1%	\$ 1,116,165	1.1%	\$ 101,099,156
1988	\$ 1,120,885	0.9%	\$ 111,537,736	91.3%	\$ 4,738,463	3.9%	\$ 650,931	0.5%	\$ 4,129,002	3.4%	\$ 122,177,017
1989	\$ 803,494	1.4%	\$ 56,194,753	95.0%	\$ 1,674,393	2.8%	\$ 86,012	0.1%	\$ 415,535	0.7%	\$ 59,174,188
1990	\$ 436,822	1.1%	\$ 35,804,485	88.0%	\$ 2,422,214	6.0%	\$ 512,591	1.3%	\$ 1,495,827	3.7%	\$ 40,671,938
1991	\$ 348,522	2.3%	\$ 12,249,200	80.4%	\$ 1,996,049	13.1%	\$ 5,478	0.0%	\$ 643,400	4.2%	\$ 15,242,649
1992	\$ 634,466	0.6%	\$ 96,026,864	96.0%	\$ 2,261,862	2.3%	\$ 404,772	0.4%	\$ 740,294	0.7%	\$ 100,068,258
1993	\$ 617,092	2.1%	\$ 27,969,409	93.1%	\$ 1,081,175	3.6%	\$ 36,935	0.1%	\$ 322,205	1.1%	\$ 30,026,815
1994	\$ 642,291	1.9%	\$ 29,441,442	85.5%	\$ 3,297,865	9.6%	\$ 240,545	0.7%	\$ 831,121	2.4%	\$ 34,453,264
1995	\$ 474,475	2.2%	\$ 19,168,077	87.1%	\$ 1,295,353	5.9%	\$ 53,114	0.2%	\$ 1,023,926	4.7%	\$ 22,014,944
1996	\$ 402,980	1.4%	\$ 28,238,578	95.0%	\$ 800,423	2.7%	\$ 44,386	0.1%	\$ 225,751	0.8%	\$ 29,712,117
1997	\$ 365,316	1.1%	\$ 31,439,536	97.1%	\$ 434,327	1.3%	\$ 12,004	0.0%	\$ 143,244	0.4%	\$ 32,394,427
1998	\$ 181,318	2.1%	\$ 7,686,993	88.5%	\$ 497,050	5.7%	\$ 187,759	2.2%	\$ 132,025	1.5%	\$ 8,685,145
1999	\$ 337,482	1.6%	\$ 20,095,838	95.5%	\$ 329,164	1.6%	\$ 5,995	0.0%	\$ 265,026	1.3%	\$ 21,033,505
2000	\$ 183,044	2.2%	\$ 7,115,614	87.2%	\$ 626,287	7.7%	\$ 47,065	0.6%	\$ 186,385	2.3%	\$ 8,158,395
2001	\$ 169,593	2.2%	\$ 7,135,690	92.3%	\$ 297,387	3.8%	\$ 20,312	0.3%	\$ 111,028	1.4%	\$ 7,734,010
2002	\$ 326,051	2.8%	\$ 10,682,051	91.7%	\$ 329,031	2.8%	\$ 84,922	0.7%	\$ 224,148	1.9%	\$ 11,646,203
2003	\$ 358,688	2.9%	\$ 11,659,037	95.1%	\$ 132,079	1.1%	\$ 8,659	0.1%	\$ 99,831	0.8%	\$ 12,258,294

Appendix A.8. Commercial herring harvest by fishery, Upper Cook Inlet, 1973-2003.

Harvest (Tons)				
Year	Eastside	Chinitna Bay	Tuxedni Bay	Total
1973	13.8	-	-	13.8
1974	36.7	-	-	36.7
1975	6.2	-	-	6.2
1976	5.8	-	-	5.8
1977	17.3	-	-	17.3
1978	8.3	55.3	-	63.6
1979	67.3	96.2	24.8	188.3
1980	37.4	20	86.5	143.9
1981	86.2	50.5	84.9	221.6
1982	60.2	91.8	50.2	202.2
1983	165.3	49.2	238.2	452.7
1984	117.5	90.6	159	367.1
1985	121.7	47.4	220.5	389.6
1986	178.9	111.1	191.9	481.9
1987	130.5	65.1	152.5	348.1
1988	50.7	23.4	14.1	88.2
1989	55.2	122.3	34.3	211.8
1990	55.4	55.9	16.1	127.4
1991	13.4	15.7	1.6	30.7
1992	24.7	10.4	-	35.1
1993	-	-	-	-
1994	-	-	-	-
1995	-	-	-	-
1996	-	-	-	-
1997	-	-	-	-
1998	19.5	-	-	19.5
1999	10.4	-	-	10.4
2000	14.7	-	-	14.7
2001	9.9	-	-	9.9
2002	16.2	1.9	0	18.1
2003	3.7	0	0	3.7

Appendix A.9. Commercial harvest of razor clams in Cook Inlet, 1919-2003.

Year	Pounds	Year	Pounds
1919	76,963	1961	277,830
1920	11,952	1962	195,650
1921	72,000	1963	0
1922	510,432	1964	0
1923	470,280	1965	0
1924	156,768	1966	0
1925	0	1967	0
1926	0	1968	0
1927	25,248	1969	0
1928	0	1970	0
1929	0	1971	14,755
1930	0	1972	31,360
1931	No Record	1973	34,415
1932	93,840	1974	0
1933	No Record	1975	10,020
1934	No Record	1976	0
1935	No Record	1977	1,762
1936	No Record	1978	45,931
1937	8,328	1979	144,358
1938	No Record	1980	140,420
1939	No Record	1981	441,949
1940	No Record	1982	460,639
1941	0	1983	269,618
1942	0	1984	261,742
1943	0	1985	319,034
1944	0	1986	258,632
1945	15,000	1987	312,349
1946	11,424	1988	399,376
1947	11,976	1989	222,747
1948	2,160	1990	323,602
1949	9,672	1991	201,320
1950	304,073	1992	296,727
1951	112,320	1993	310,481
1952	0	1994	355,165
1953	0	1995	248,358
1954	0	1996	355,448
1955	0	1997	366,532
1956	0	1998	371,877
1957	0	1999	352,910
1958	0	2000	369,397
1959	0	2001	348,917
1960	372,872	2002	338,938
		2003	411,403

Appendix A.10. Enumeration goals and counts of sockeye salmon in selected Streams of Upper Cook Inlet, 1978-2003.

Year	Kenai River		Kasilof River		Fish Creek	
	Enumeration Goal	Enumeration Estimate ^{a,f}	Enumeration Goal	Enumeration Estimate ^{a,f}	Enumeration Goal	Enumeration Estimate ^b
1978	350,000-500,000	398,900	75,000-150,000	116,600	0	3,555
1979	350,000-500,000	285,020	75,000-150,000	152,179	0	68,739
1980	350,000-500,000	464,038	75,000-150,000	184,260	0	62,828
1981	350,000-500,000	407,639	75,000-150,000	256,625	0	50,479
1982	350,000-500,000	619,831	75,000-150,000	180,239	50,000	28,164
1983	350,000-500,000	630,340	75,000-150,000	210,271	50,000	118,797
1984	350,000-500,000	344,571	75,000-150,000	231,685	50,000	192,352
1985	350,000-500,000	502,820	75,000-150,000	505,049 ^g	50,000	68,577
1986	350,000-500,000	501,157	75,000-150,000	275,963	50,000	29,800
1987	400,000-700,000	1,596,871	150,000-250,000	249,250	50,000	91,215
1988	400,000-700,000	1,021,469	150,000-250,000	204,000 ^d	50,000	71,603
1989	400,000-700,000	1,599,959	150,000-250,000	158,206	50,000	67,224
1990	400,000-700,000	659,520	150,000-250,000	144,289	50,000	50,000
1991	400,000-700,000	647,597	150,000-250,000	238,269	50,000	50,500
1992	400,000-700,000	994,798	150,000-250,000	184,178	50,000	71,385
1993	400,000-700,000	813,617	150,000-250,000	149,939	50,000	117,619
1994	400,000-700,000	1,003,446	150,000-250,000	205,117	50,000	95,107
1995	450,000-700,000	630,447	150,000-250,000	204,935	50,000	115,000
1996	550,000-800,000	797,847	150,000-250,000	249,944	50,000	63,160
1997	550,000-825,000	1,064,818	150,000-250,000	266,025	50,000	54,656
1998	550,000-850,000	767,558	150,000-250,000	273,213	50,000	22,853
1999	600,000-1,100,000	803,379	150,000-250,000	312,587	50,000	26,667
2000	600,000-1,100,000	624,578	150,000-250,000	256,053	50,000	19,533
2001	600,000-1,100,000	650,036	150,000-250,000	307,570	50,000	43,469
2002	600,000-1,100,000	957,924	150,000-250,000	226,682	20,000 - 70,000	90,483
2003	600,000-1,100,000	1,181,309	150,000-250,000	359,633	20,000 - 70,000	92,298

Year	Yentna River		Crescent River		Packers Creek	
	Enumeration Goal ^c	Enumeration Estimate ^{a,f}	Enumeration Goal	Enumeration Estimate ^{a,f}	Enumeration Goal	Enumeration Estimate ^b
1978	100,000		0	N/C	0	N/C
1979	100,000		50,000	86,654	0	N/C
1980	100,000		50,000	90,863	0	16,477
1981	100,000	139,401	50,000	41,213	0	13,024
1982	100,000	113,847	50,000	58,957	0	15,687
1983	100,000	104,414	50,000	92,122	0	18,403
1984	100,000	149,375	50,000	118,345	0	30,684
1985	100,000	107,124	50,000	128,628	0	36,850
1986	100,000-150,000	92,076	50,000	20,385 ^e	0	29,604
1987	100,000-150,000	66,054	50,000-100,000	120,219	0	35,401
1988	100,000-150,000	52,330	50,000-100,000	57,716	15,000-25,000	18,607
1989	100,000-150,000	96,269	50,000-100,000	71,064	15,000-25,000	22,304
1990	100,000-150,000	140,290	50,000-100,000	52,238	15,000-25,000	31,868
1991	100,000-150,000	109,632	50,000-100,000	44,578	15,000-25,000	41,275
1992	100,000-150,000	66,054	50,000-100,000	58,229	15,000-25,000	28,361
1993	100,000-150,000	141,694	50,000-100,000	37,556	15,000-25,000	40,869
1994	100,000-150,000	128,032	50,000-100,000	30,355	15,000-25,000	30,788
1995	100,000-150,000	121,479	50,000-100,000	52,311	15,000-25,000	29,473
1996	100,000-150,000	90,781	50,000-100,000	28,729	15,000-25,000	19,095
1997	100,000-150,000	157,822	50,000-100,000	70,768	15,000-25,000	33,846
1998	100,000-150,000	119,623	50,000-100,000	62,257	15,000-25,000	17,732
1999	100,000-150,000	99,029	25,000-50,000	66,519	15,000-25,000	25,648
2000	100,000-150,000	133,094	25,000-50,000	56,599	15,000-25,000	20,151
2001	100,000-150,000	83,532	25,000-50,000	78,081	15,000-25,000	no count
2002	90,000-160,000	78,591	25,000-50,000	62,833	15,000-25,000	no count
2003	90,000-160,000	180,813	25,000-50,000	122,457	15,000-25,000	no count

^a Derived from sonar counters unless otherwise noted.

^b Weir Counts.

^c Yentna River escapement goal only.

^d Combined counts from weirs on Bear and Glacier Flat Creeks and surveys of remaining spawning streams; sonar count was 151,856.

^e Counts through 16 July only.

^f Enumeration estimates prior to 2002 reflect minor adjustments to the escapement database.

Appendix A.11. Average price^a paid for commercially harvested salmon,
Upper Cook Inlet, 1969-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum
1969	0.38	0.28	0.19	0.14	0.12
1970	0.40	0.28	0.25	0.14	0.14
1971	0.37	0.30	0.21	0.15	0.15
1972	0.47	0.34	0.27	0.19	0.20
1973	0.62	0.65	0.50	0.30	0.42
1974	0.88	0.91	0.66	0.46	0.53
1975	0.54	0.63	0.54	0.35	0.41
1976	0.92	0.76	0.61	0.37	0.54
1977	1.26	0.86	0.72	0.38	0.61
1978	1.16	1.32	0.99	0.34	0.51
1979	1.63	1.41	0.98	0.34	0.88
1980	1.15	0.85	0.57	0.34	0.53
1981	1.46	1.20	0.83	0.38	0.65
1982	1.27	1.10	0.72	0.18	0.49
1983	0.97	0.74	0.45	0.18	0.36
1984	1.08	1.00	0.64	0.21	0.39
1985	1.20	1.20	0.70	0.20	0.45
1986	0.90	1.40	0.60	0.15	0.38
1987	1.40	1.50	0.80	0.22	0.45
1988	1.30	2.47	1.20	0.37	0.76
1989	1.25	1.70	0.75	0.40	0.47
1990	1.20	1.55	0.75	0.25	0.60
1991	1.20	1.00	0.77	0.12	0.35
1992	1.50	1.60	0.75	0.15	0.40
1993	1.20	1.00	0.60	0.12	0.45
1994	1.00	1.45	0.80	0.12	0.40
1995	1.00	1.15	0.45	0.12	0.27
1996	1.00	1.15	0.40	0.05	0.19
1997	1.00	1.15	0.45	0.05	0.19
1998	1.00	1.15	0.45	0.09	0.19
1999	1.00	1.30	0.45	0.12	0.19
2000	1.10	0.85	0.40	0.09	0.19
2001	1.00	0.65	0.40	0.08	0.19
2002	1.15	0.60	0.20	0.05	0.12
2003	0.95	0.60	0.20	0.05	0.12

^a Price is expressed as dollars per pound.

Data Source: 1969-1983- Commercial Fisheries Entry Commission. 1984-2003 - Random fish ticket averages, does not include bonuses or post season adjustments.

Appendix A.12. Average weight^a (in pounds) of commercially harvested salmon,
Upper Cook Inlet, 1969-2003.

Year	Chinook	Sockeye	Coho	Pink	Chum
1969	17.1	6.7	7.0	3.9	7.3
1970	26.8	5.8	6.8	4.0	7.2
1971	25.9	6.6	6.5	3.4	9.3
1972	29.7	6.2	6.3	4.0	6.7
1973	37.6	7.4	6.1	3.7	7.6
1974	36.1	6.8	6.4	4.1	7.2
1975	24.8	6.1	6.8	3.6	7.1
1976	27.4	6.9	6.4	4.0	8.1
1977	28.1	7.6	6.7	3.7	8.0
1978	33.0	7.6	6.4	3.8	7.6
1979	27.5	6.2	6.3	3.3	7.3
1980	26.1	5.9	5.8	3.5	7.3
1981	23.8	6.4	6.5	3.5	7.7
1982	28.8	7.0	7.1	3.9	8.2
1983	29.5	6.4	6.9	3.3	7.8
1984	28.6	5.9	7.1	4.0	7.6
1985	27.7	5.6	7.2	3.3	7.6
1986	25.9	5.8	6.4	3.7	7.4
1987	29.0	6.7	6.6	3.5	7.1
1988	29.7	6.6	7.1	3.7	7.7
1989	24.0	6.6	6.6	3.2	7.3
1990	22.6	6.4	6.5	3.4	7.1
1991	21.5	5.6	6.1	3.1	6.6
1992	24.6	6.6	6.4	3.9	6.8
1993	27.5	5.9	5.9	3.1	5.8
1994	31.7	5.7	7.1	3.9	6.9
1995	26.6	5.7	6.4	3.3	7.2
1996	28.3	6.3	6.2	3.7	7.6
1997	27.6	6.6	6.3	3.4	7.3
1998	22.7	5.5	6.9	3.8	7.3
1999	23.9	5.8	5.8	3.1	8.0
2000	22.6	6.3	6.6	3.6	7.7
2001	18.2	6.0	6.6	3.5	6.9
2002	22.3	6.4	6.7	3.8	7.9
2003	20.4	5.6	6.5	3.6	6.9
Average	26.7	6.3	6.5	3.6	7.4

^a Total poundage divided by numbers of fish from fish ticket totals.

Appendix A.13. Registered units of gillnet fishing effort by gear type in Cook Inlet, 1960-2003.

Year	DRIFT GILLNET			SET GILLNET			Total
	Resident	Non-Resident	Sub-Total	Resident	Non-Resident	Sub-Total	
1960	221	67	288	511	59	570	858
1961	279	93	372	564	22	586	958
1962	260	112	372	589	28	617	989
1963	333	139	472	626	34	660	1,132
1964	323	145	468	596	35	631	1,099
1965	329	145	474	556	34	590	1,064
1966	328	176	504	580	48	628	1,132
1967	350	186	536	554	50	604	1,140
1968	407	204	611	638	43	681	1,292
1969	497	208	705	686	42	728	1,433
1970	537	220	757	707	65	772	1,529
1971	519	191	710	693	38	731	1,441
1972	419	152	571	672	35	707	1,278
1973	516	146	662	632	43	675	1,337
1974	436	149	585	698	54	752	1,337
1975	539	245	784	695	63	758	1,542
1976	410	186	596	675	44	719	1,315
1977	387	188	575	690	43	733	1,308
1978	401	190	591	701	46	747	1,338
1979	410	189	599	705	44	749	1,348
1980	407	190	597	699	48	747	1,344
1981	412	186	598	687	60	747	1,345
1982	413	178	591	695	53	748	1,339
1983	415	172	587	684	61	745	1,332
1984	423	165	588	670	74	744	1,332
1985	418	173	591	669	76	745	1,336
1986	412	176	588	665	78	743	1,331
1987	415	171	586	662	81	743	1,329
1988	421	164	585	660	83	743	1,328
1989	415	170	585	645	98	743	1,328
1990	412	173	585	644	99	743	1,328
1991	412	172	584	642	103	745	1,329
1992	404	179	583	636	109	745	1,328
1993	398	185	583	633	112	745	1,328
1994	395	187	582	628	117	745	1,327
1995	393	189	582	622	123	745	1,327
1996	392	190	582	621	124	745	1,327
1997	392	189	581	621	124	745	1,326
1998	394	185	579	621	124	745	1,324
1999	390	185	575	621	124	745	1,320
2000	394	182	576	621	124	745	1,321
2001	395	179	574	625	119	744	1,318
2002	396	176	572	620	123	743	1,315
2003	401	171	572	619	123	742	1,314

Source: 1960-1974 ADF&G unpublished reports, 1975-2003 Commercial Fisheries Entry Commission.

<http://www.cfec.state.ak.us/SPCS/MENUS.HTM>

Appendix A.14. Forecast^a and projected^b commercial harvests of salmon by species, Upper Cook Inlet, 1984-2003.

Year	Sockeye			Coho			Pink			Chum			Chinook		
	Forecast	Actual ^c	Error	Projected	Actual ^c	Error	Projected	Actual ^c	Error	Projected	Actual ^c	Error	Projected	Actual ^c	Error
1984	2,200,000	2,102,767	-4%	250,000	442,619	77%	1,700,000	622,510	-63%	350,000	684,124	95%	14,000	8,819	-37%
1985	3,700,000	4,060,260	10%	250,000	667,213	167%	112,500	87,828	-22%	700,000	772,829	10%	17,500	24,086	38%
1986	4,200,000	4,787,982	14%	450,000	756,830	68%	1,250,000	1,299,360	4%	900,000	1,134,173	26%	32,500	39,240	21%
1987	4,800,000	9,465,994	98%	500,000	449,421	-10%	150,000	348,809	-27%	1,000,000	348,809	-65%	30,000	39,431	32%
1988	5,300,000	6,843,833	29%	400,000	560,948	40%	400,000	710,615	17%	800,000	710,615	-11%	35,000	29,080	-17%
1989	2,500,000	5,011,124	100%	400,000	339,818	-15%	100,000	122,051	-33%	800,000	122,051	-85%	30,000	26,737	-11%
1990	4,300,000	3,604,259	-16%	250,000	501,643	101%	600,000	351,123	-41%	400,000	351,123	-12%	25,000	16,105	-36%
1991	3,200,000	2,178,331	-32%	400,000	426,487	7%	90,000	280,223	211%	500,000	280,223	-44%	20,000	13,542	-32%
1992	3,600,000	9,108,353	153%	400,000	468,930	17%	400,000	274,303	-31%	350,000	274,303	-22%	20,000	17,171	-14%
1993	2,500,000	4,755,329	90%	450,000	306,882	-32%	25,000	122,770	391%	350,000	122,770	-65%	15,000	18,871	26%
1994	2,000,000	3,565,586	78%	400,000	583,793	46%	600,000	303,177	-49%	250,000	303,177	21%	15,000	19,941	33%
1995	2,700,000	2,951,827	9%	400,000	446,954	12%	100,000	529,422	429%	250,000	529,422	112%	15,000	17,893	19%
1996	3,300,000	3,888,922	18%	400,000	321,668	-20%	600,000	156,501	-74%	350,000	156,501	-55%	15,000	14,306	-5%
1997	5,300,000	4,176,738	-21%	400,000	152,404	-62%	100,000	103,036	3%	250,000	103,036	-59%	15,000	13,292	-11%
1998	2,500,000	1,219,242	-51%	300,000	160,660	-46%	300,000	95,654	-68%	200,000	95,654	-52%	17,000	8,124	-52%
1999	2,000,000	2,680,510	34%	300,000	125,908	-58%	75,000	174,541	133%	200,000	174,541	-13%	16,000	14,383	-10%
2000	3,000,000	1,322,482	-56%	150,000	236,871	58%	500,000	127,069	-75%	200,000	127,069	-36%	15,000	7,350	-51%
2001	2,700,000	1,826,833	-32%	300,000	113,311	-62%	50,000	84,494	69%	250,000	84,494	-66%	13,000	9,295	-29%
2002	2,200,000	2,773,118	26%	160,000	246,281	54%	170,000	237,949	40%	120,000	237,949	98%	10,000	12,714	27%
2003	2,400,000	3,476,159	45%	170,000	101,756	-40%	80,000	120,744	51%	140,000	120,744	-14%	10,000	18,490	85%
Avg.	3,263,158	3,989,982	22%	345,263	370,520	7%	385,395	307,609	-20%	432,632	336,680	-22%	19,474	18,444	-5%

^a Harvest forecasts have typically been prepared using average return per spawner values, parent-year escapements and average marine maturity schedules or time series modeling tempered by available juvenile production data or combinations of these data sets.

^b Harvest projections are prepared using subjective estimates of parent-year escapements, gross trends in harvest, and expected intensity of fishery.

^c Actual harvests prior to 2002 reflect minor adjustments to harvest database.

Table A.15. Subsistence and educational fishery salmon harvest, Upper Cook Inlet, 1980-2003.

Fishery	No. of Permits	Chinook	Sockeye	Coho	Pink	Chum
<u>Tvonek Subsistence</u>						
1980	67	1,757	235	0	0	0
1981	70	2,002	269	64	32	15
1982	69	1,590	310	113	14	4
1983	75	2,665	187	59	0	6
1984	75	2,200	266	79	3	23
1985	76	1,472	164	91	0	10
1986	65	1,676	203	223	50	46
1987	64	1,610	166	149	10	24
1988	47	1,587	91	253	8	12
1989	49	1,250	85	115	0	1
1990	42	781	66	352	20	12
1991	57	902	26	58	0	0
1992	57	907	75	234	7	19
1993	62	1,370	57	77	19	17
1994	49	770	85	101	0	22
1995	55	1,317	45	153	0	15
1996	49	1,039	68	137	21	7
1997	42	639	101	137	0	8
1998	74	978	163	64	1	2
1999	76	1,230	144	94	32	11
2000	60	1,157	63	87	6	0
2001	84	976	172	49	4	6
2002	102	898	76	127	17	4
2003	91	973	89	29	5	10
<u>Yentna Subsistence</u>						
1996	17	0	242	46	115	51
1997	24	0	549	83	30	10
1998	21	0	495	113	30	15
1999	18	0	516	48	18	13
2000	19	0	379	92	4	7
2001	16	0	545	50	10	4
2002	25	0	454	133	14	31
2003	19	0	553	67	2	8
<u>Educational Fisheries^a</u>						
1994	na	57	1,907	948	134	-
1995	na	40	1,498	953	35	-
1996	na	105	2,242	648	211	-
1997	na	236	2,884	290	60	-
1998	na	252	3,266	843	135	-
1999	na	283	2,690	690	28	-
2000	na	220	2,713	835	680	-
2001	na	353	4,510	805	166	-
2002	na	200	3,366	1,122	545	-
2003	na	307	5,171	616	91	-

^a Educational fisheries consist of Kenaitze Tribal, Ninilchik Traditional Council, and Ninilchik Native Descendents.

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